

# An overview of the performance of the NHS in Scotland

Prepared for the Auditor General for Scotland

August 2004



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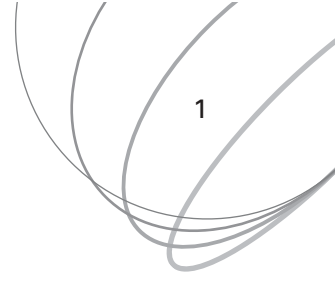
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### Acknowledgments

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## Summary



The challenge for the NHS in Scotland, at both national and local levels, is to ensure that increases in spending are leading to better outcomes and services for patients.

## Introduction

**1.** This report provides an overview of the performance of the NHS in Scotland and is the first report of its kind. It draws together different sources of published information, which have never been brought together before. It complements the *Overview of the National Health Service in Scotland 2002/03* which focused on the financial health of the NHS and was published in December 2003.

**2.** The NHS in Scotland provides treatment to five million people and costs around £7 billion each year. Services are delivered in the community, in primary care settings, and in acute and continuing care hospitals. The NHS in Scotland:

- has over 4,300 GPs, equivalent to one GP for every 1,400 people
- employs over 147,000 staff, with nearly half of these being nurses and midwives
- supplies 70 million prescriptions a year, at a cost of £887 million
- has 31,000 hospital beds, equivalent to six per 1,000 population or one bed for every 167 people
- provides around a million episodes of care, admitting around 680,000 people as inpatients to hospital and treating another 360,000 as day cases
- delivers patient care through outpatient clinics with around 4.7 million attendances each year.

**3.** The aim of the Scottish Executive is to improve the health and quality of life of the people of Scotland and deliver integrated health and

community care services. To achieve this it has set four objectives<sup>1</sup> for the NHS in Scotland:

- to work towards a step change in life expectancy for Scots, particularly disadvantaged members of the community including children and older people
- to ensure swift and appropriate access to integrated health care, covering primary, community and acute care
- to improve patients' experience of services provided by the NHS
- to improve services for older people, at home and in care settings.

**4.** This report looks at the achievement of these objectives and their associated targets. A summary of the objectives and targets for NHSScotland is included in Appendix 1 to this report.

**5.** The report is organised into seven parts:

- Part 1 briefly outlines how NHSScotland is organised and how it manages its performance.
- Part 2 comments on Scotland's health compared with other nations and discusses health improvement and public health.
- Part 3 looks at the resources available to NHSScotland, such as funding and staffing, and considers how increased funds are being spent.
- Part 4 reports on measures of NHS efficiency, including capacity and activity.

- Part 5 focuses on patients waiting for care.
- Part 6 looks at outcomes in the national clinical priorities of cancer, coronary heart disease, stroke, and mental health.
- Part 7 examines how the health service is working with local government partners to deliver better care to older people living in the community.

## Data sources

**6.** The information used in this report has been published previously, including data from the performance assessment framework (PAF), the Information and Statistics Division of the NHS, NHS Health Scotland and the Chief Medical Officer (CMO) for NHSScotland. Other data come from the General Register Office for Scotland, British Heart Foundation and Cancer Research UK. International comparisons have been taken from the Organisation for Economic Cooperation and Development (OECD) and Office of Health Economics (OHE).

**7.** We have tried to make this report as current as possible and have included references from data and other documents published to mid-April 2004.

## Selecting the topics

**8.** In planning this report we have taken account of those areas of performance that we think are important to patients and to the public in general. We have also taken account of NHSScotland's performance management system. But the scope of the report is restricted to those areas where information is available. Information on patients in the acute sector is well

<sup>1</sup> *Scottish Executive Draft Budget 2004-05*, Scottish Executive, 2003.

developed in Scotland. However, information on primary and community care services is not nearly as good and this has limited the extent to which a comprehensive assessment of NHS efficiency and effectiveness can be made. It has also restricted the conclusions we are able to draw.

### Information availability

**9.** Good planning and management depend on sound information and intelligence based on robust data. However, current data systems used to collect and report patient activity and costs have not kept pace with the scale of change within the NHS as a whole. These changes are significant, and include:

- changes in where and how healthcare is delivered with a greater emphasis on treating people in community settings rather than hospital
- technological developments
- medical advances
- more joint working between the NHS, councils and the independent sector to deliver joined-up services.

**10.** A recurring theme in this report is that better information is needed to track the effect of these changes. This requires better information on cost, quality of services from a patient's perspective, and on activity across the whole healthcare system. This includes the mapping of service activity through managed clinical networks for specific conditions such as cancer, or for chronic disease management. There is a commitment to delivering a patient centred NHS but very little evidence that this is being monitored consistently across Scotland.

**11.** The NHS in Scotland has acknowledged these data gaps and the Information and Statistics Division (ISD) of the NHS is developing new national data systems. We understand that ISD has put together a considerable programme of work to address all significant gaps in data provision and has recently set up a group to improve understanding of the factors affecting current activity trends.

**12.** The challenge for the NHS, at both national and local levels, is to ensure that:

- the new data accurately reflect changes in service delivery so that performance and outcomes can be measured
- increases in spending on the NHS in Scotland are leading to better outcomes and services for patients.

### Key messages

**13.** People living in Scotland tend to have poorer health and lower life expectancy than people in the rest of the UK. This can largely be attributed to higher levels of deprivation in some areas of Scotland, together with relatively poor lifestyles including smoking, high alcohol consumption and poor diet. There remains a persistent health gap between the most affluent and deprived communities and reducing this gap may be the biggest challenge for NHSScotland.

**14.** Scotland spends around £1,400 per person on healthcare each year, more than the rest of the UK and around the European average. Significant factors contributing to the higher level of spending are the high levels of deprivation and remoteness found in some areas of Scotland. Spending is due to increase over the

next three years, although much of this increase is likely to be absorbed by cost pressures, such as pay modernisation and prescription drugs. Some of the new money will also go towards meeting targets for more doctors, nurses and allied health professionals (AHPs), and improving healthcare buildings and facilities. Scotland has more doctors and nurses per head of population than elsewhere in the UK and meeting some of the staff targets will be challenging.

**15.** It is the Scottish Executive Health Department's (SEHD) intention that pay modernisation initiatives will help to deliver service redesign. The SEHD will need to demonstrate in future that services are improving and that the NHS in Scotland is achieving value for money from the investment in pay modernisation. The SEHD needs to set clear objectives for each of the new contracts and specify how they will measure performance against the objectives. For example, the SEHD should make it clear whether it expects to see an increase in activity or better outcomes. SEHD has set NHS boards 'strategic tests' for the new GMS contract and we understand that its Pay Modernisation Team is developing ways of measuring the benefits to patients from other pay modernisation initiatives. The relationship between pay and service benefits is complex and the effect on service delivery is expected to happen in the medium to long term rather than immediately.

**16.** It is difficult to quantify the benefits from higher healthcare spending in Scotland because of the failure of information to keep up with changes in healthcare delivery but some patterns are clear:

- Scotland has more beds per head of population than England.
- Total acute activity – emergency and elective inpatients and day case admissions – has been falling over the past few years and this decline in activity continues with a slight reduction in the last year. For 2003/04, the small increases in day case and emergency inpatient activity have been offset by a reduction in elective inpatient admissions.
- Total outpatient activity has been steady year-on-year.
- Inpatient and day case waiting times targets are being met with significant investment in waiting times initiatives. But there is still work to be done to achieve the waiting times targets for the national priorities of coronary heart disease and cancer.
- Over 87% of outpatients are seen within 26 weeks of referral. This percentage is improving but it is too early to say whether the NHS in Scotland will achieve the Executive's target by the end of 2005.
- The predicted growth in the older population will put increasing pressure on health and community care services. Older people account for many emergency admissions and delayed discharges remain a problem despite new money and concerted efforts by local health and council partnerships.

- Every year cancer, coronary heart disease and stroke account for 65% of all deaths in Scotland. Death rates for these conditions have been falling consistently in Scotland over the past eight years and the Executive's targets are likely to be met. Five-year survival rates are also improving but Scotland still lags behind the rest of the UK and European Union<sup>2</sup> countries.

**17.** Further work is needed to clarify targets where they are open to different interpretation, and improve those that are not measurable or provide an incomplete picture of performance. For example, the baseline for staffing targets has only recently been clarified as headcount. All targets should be reviewed and refined on a regular basis so that they can contribute to continuous improvement in services. In particular the targets relating to health improvement and mental health services need attention.

# Part 1. Setting the scene



## Key messages

The SEHD has detailed arrangements in place to hold NHS boards to account for their performance. But at present it does not publish a single source of information in a user-friendly format for the public to show how NHSScotland is performing against its key targets.

## How is the NHS in Scotland organised?

**18.** The NHS in Scotland restructured on 1 April 2004 ([Exhibit 1](#)). New single system structures are in place in each NHS board area with new operating divisions to deliver services in place of NHS trusts. Most NHS boards have based their operating divisions on acute and primary care services, but some have continued with a geographical split. For example, NHS Argyll & Clyde has three integrated divisions based on geographical locations.

**19.** NHS boards are also establishing Community Health Partnerships (CHPs), which bring together primary care professionals and planning partners to coordinate, for their area or district, the planning, development and provision of the community health services for which the NHS board is responsible.

**20.** This report discusses the performance of NHS boards and the NHS in Scotland as a whole. It does not comment on the performance of individual special health boards or nationally provided services.

## Reporting NHS performance

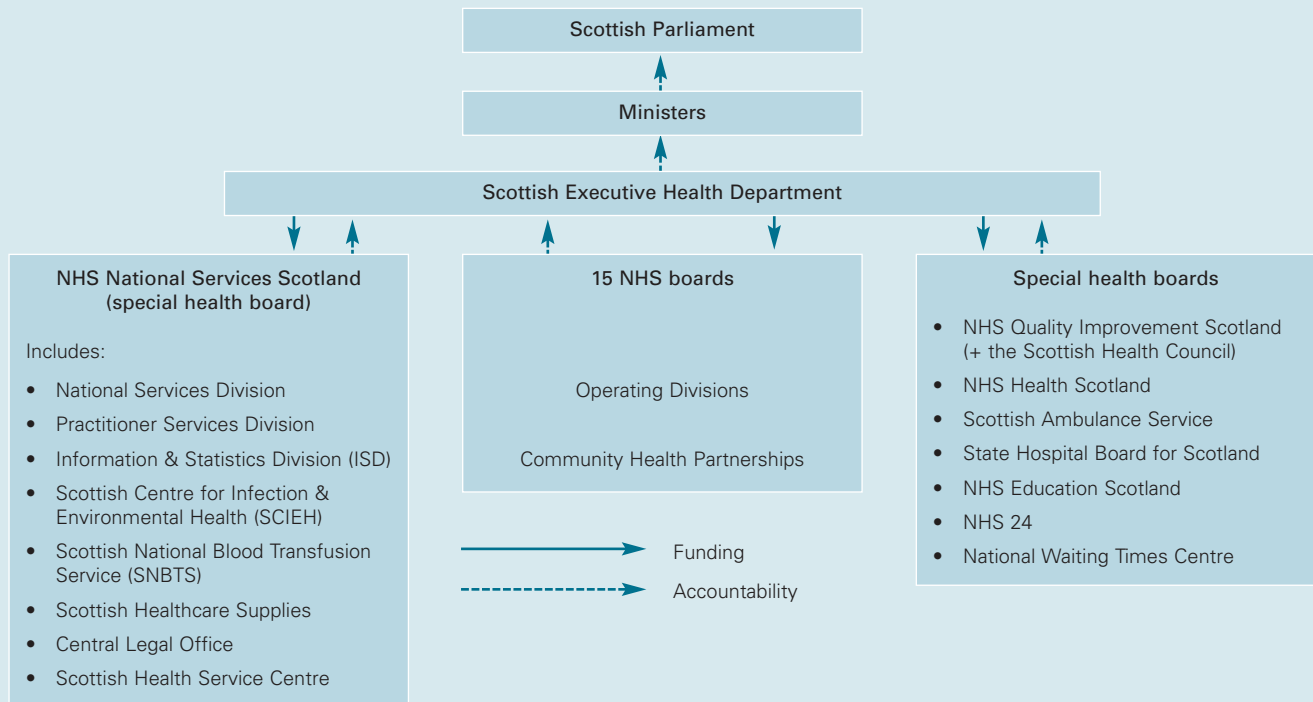
**21.** The performance of the NHS in Scotland is managed and reported at different levels:

- NHS boards prepare local health plans annually.
- The SEHD monitors local health systems through regular performance returns and the Performance Assessment Framework.
- Annual accountability review meetings are held between the SEHD and each NHS board to discuss and agree past performance and future priorities.
- NHS boards publish annual reports on their activities and performance.
- The Scottish Executive sets strategic objectives and national priorities for the NHS as a whole. The national priorities are shown opposite, and the current aims, objectives and targets of the NHS in Scotland are set out in Appendix 1.



## Exhibit 1

### Organisational structure of the NHS in Scotland



Source: Scottish Parliament Information Centre (SPICE)

### The 12 national priorities for NHSScotland

1. Service redesign
2. Health improvement
3. Delayed discharges
4. 48-hour access to a member of the primary care team
5. Cancer
6. Coronary heart disease and stroke
7. Mental health
8. Waiting times
9. Public involvement
10. Workforce development and staff governance
11. Healthcare acquired infection and hygiene
12. Financial break-even

### Using the performance assessment framework

**22.** The SEHD has introduced a Performance Assessment Framework (PAF) with the aim of improving the accountability of NHS boards to Scottish ministers and the public. The PAF aims to give an overall picture of the performance of a local NHS system, taking account

of the complexities of the services provided by the NHS in Scotland. It includes over 100 qualitative and quantitative indicators. It covers seven assessment areas, including physical and mental health improvements, clinical outcomes and service standards alongside good financial management.

**23.** The PAF is currently being reviewed<sup>3</sup> but early indications are that it is viewed as a fair assessment tool by local NHS management and the joint approach to developing the framework is welcomed. We understand that SEHD plans to improve the PAF by making the national reporting of trends more user-friendly and providing an explanatory guide to make the PAF more understandable to its users.

**24.** The SEHD publishes the PAF indicators for the coming year in the autumn of each year. The outcomes against these indicators are then published in the following summer on the ISD website.<sup>4</sup> The PAF is used locally by NHS boards to prepare their local health plans and annual reports.

**25.** Since summer 2002, SEHD has used performance data generated through the PAF to hold NHS bodies to account through the accountability review process. NHS boards publish their accountability review letters in their annual reports each year. This allows the board's population to see how their local NHS system is performing. But there is a gap in how the NHS as a whole reports on its performance to the public.

<sup>3</sup> The Health Economics Research Unit (HERU) at Aberdeen University is undertaking this work.

<sup>4</sup> [www.isdscotland.org](http://www.isdscotland.org)

## Part 2. Health improvement and public health

### Key messages

In general terms Scotland's health is poor in comparison with other European countries and many people do not have a healthy lifestyle.

Life expectancy in Scotland is poor in comparison with the rest of the UK. There remains a persistent health gap between the most affluent and deprived communities.

Just under a third of adults in Scotland smoke; 33% of men and 15% of women exceed weekly limits of alcohol consumption; around half the population do not have a healthy diet; and one in five adults are obese. All of these are known risk factors for serious health problems including cancer, coronary heart disease and stroke.

Investment in physical and mental health improvement programmes is increasing and targets have been set across a range of 'healthy living' areas. But the total investment is not known and it will be difficult to

measure whether the targets are being met. There are difficulties in creating an evidence base for health improvement but targets need to be measurable and timely.

### How healthy are we in Scotland?

**26.** Life expectancy in Scotland is improving but there is still much more to be done if Scotland is to achieve its goal of a healthy active population. Life expectancy for women in Scotland (78.7 years) is the lowest in the European Union; for men (73.4 years) it is the second lowest after Portugal. Although there have been small increases since 1989, Scotland is only now achieving levels of life expectancy seen in other European countries in 1970. If Scotland is to improve its position, it must reduce mortality at a faster rate than the European average.

**27.** To get a better picture of our health we need to look at healthy life expectancy, or the number of years people can expect to live in good health. The difference between life

expectancy and healthy life expectancy indicates the length of time people can expect to be in poor health. For example, a girl born in 2000 would be expected to live for 78.7 years. Of these years she could expect to spend around 85% (67.2 years) of her life in good or fairly good health and around three-quarters (57.5 years) of her life free from limiting, longstanding illness. A similar life pattern exists for men. Although on average their life expectancy is shorter, men can expect to spend around 88% (64.6 years) in good or fairly good health and around three-quarters (54.5 years) free from limiting, longstanding illness. These statistics show that on average people living in Scotland are likely to be in poor health or suffer from a longstanding illness during the last part of their working lives and during all or most of their retirement.

**28.** In recognition of the effect of deprivation on ill-health a recent report<sup>5</sup> shows that Scotland's overall health has improved gradually over the decade to 2001, but there remains a persistent health gap

between the most affluent and deprived communities. The Arbutnott formula was developed in 2000. This formula is used to determine the allocation of funds to NHS boards. Many factors affect health, including age, sex, ethnicity, poverty, smoking, drinking, drug use, diet and exercise, as well as the standard of healthcare available. The Arbutnott review found that the four most reliable indicators of a population's health are:

- standardised mortality rate among people aged 0-64 averaged over a five-year period
- the proportion of households having two or more deprivation indicators
- the proportion of the population of working age claiming unemployment benefit
- the proportion of the population aged 65 and over claiming income support.

**29.** Poverty and social exclusion are at the root of much of Scotland's ill-health, and Scotland compares poorly with other countries. In 1996, one in five people in Scotland lived in low income households, compared to 16% in Germany and France and 12% in the Netherlands.<sup>6</sup> In 2001, around 7.5% of the population were permanently sick or disabled, and more than one in five people had a limiting long-term illness, health problem or disability which affected their daily activities or work.<sup>7</sup>

**30.** One of the key reasons for Scotland's poor health is deprivation but it is not the only factor. For example, lifestyle can also affect a person's health. The NHS in Scotland recognises that it cannot achieve health improvement acting alone and

that it must work in partnership with other agencies and in particular councils.

### How our health varies across the country

**31.** The constituency profiles produced by NHS Health Scotland show significant variation within Scotland. The average life expectancy for a boy born today is 64 years in Glasgow Shettleston, compared to 78 years in North East Fife. For a girl born today the average life expectancy is 82 years in North East Fife but only 75 years in Glasgow Springburn.

**32.** Looking at constituencies in more detail shows that Glasgow Shettleston not only has the shortest life expectancy for men but it also has some of the poorest rates for other deprivation factors. It has the lowest gross household income, the highest proportion of children in workless households and over one quarter of adults are unable to work due to incapacity or ill-health. Around half of the resident population smoke, there are more admissions to hospital for alcohol related reasons than any other area and it has the highest number of drug related deaths. Death rates show that it has the highest number of deaths for cancer and second highest for heart disease.

**33.** But Glasgow Shettleston is not alone. Some of the other Glasgow constituencies also have high deprivation factors when looking at income, unemployment, smoking, alcohol related illnesses and drug related deaths.

**34.** North East Fife and West Aberdeenshire and Kincardine are consistently high ranking when looking at deprivation factors such as unemployment, smoking and alcohol related hospital admissions.

### Investing in health improvement

**35.** The Scottish Executive has allocated a significant sum of money to target health improvement. The Health Improvement Fund, set up in 2000, provides an investment stream of £26 million each year with revenues from higher tobacco tax. In autumn 2002, Scottish ministers gave a commitment to prioritising health improvement, with a major increase in spending on public health. Additional resources of £23m, £50m and £100m were announced for the next three years for the Scottish Executive as a whole. These additional resources will be routed through community planning partnerships and other organisations such as SportsScotland, and will be spent on various initiatives including early years provision, exercise and school meals.

**36.** Improvements in the general health of the population are complex and take a long time to achieve. The CMO has stated that it is difficult to quantify the level of health improvement investment. It is also too early to tell what effect the additional investment directed at public health or health improvement in general is having.

### Is our health improving?

**37.** The recently published World Health Report<sup>8</sup> identified six key risk factors for poor health:

- smoking
- alcohol
- blood pressure
- cholesterol
- body mass index (obesity)
- low fruit and vegetable intake.

**38.** The Scottish Executive set targets for smoking, alcohol consumption, diet and exercise in *Towards a Healthier*

6 *Scotland's Health – A Report Card*, Public Health Institute of Scotland, 2003.

7 General Register Office for Scotland 2001 census.

8 *World Health Report 2002*, World Health Organisation.

Scotland.<sup>9</sup> Performance against each of these targets is reported through the PAF and is discussed further in this part of the report.

**39.** Data are taken from the Scottish Health Surveys (1995 and 1998) and the CMO in Scotland's Annual Reports for 2002 and 2003.<sup>10</sup> These are the most recent data available for these health improvement targets. Some of these data are currently five years out of date and rely on self-reporting, which may not be a very reliable source. We understand that results from the third Scottish Health Survey will be available early in 2005. In setting targets the SEHD should consider how measurable these targets are and how it will collect and report progress on a regular basis.

### Smoking

**40.** Smoking is the single biggest cause of preventable premature death and ill-health in Scotland. Overall, a third of all deaths from cancer, including around 80% of lung cancer deaths, and a sixth of deaths from other causes are linked to tobacco smoking. Each year, in Scotland, smoking accounts for more than 13,000 deaths and more than 35,000 people are admitted to hospital with smoking-related diseases at an estimated cost of £200 million.<sup>11</sup>

**41.** The Scottish Executive set out its plans for tobacco control in *A Breath of Fresh Air For Scotland*.<sup>12</sup> In 2002/03 the Scottish Executive allocated £1.5 million to NHS Health Scotland for anti-tobacco health promotion work including passive smoking. Additional funding of £1 million in 2003/04 and 2004/05 and a further £5 million in 2005/06 has been allocated as part of the tobacco control action plan.

### Smoking among adults

**42.** There are an estimated 1.2 million smokers in Scotland. The Scottish Executive set targets to reduce the proportion of adults (aged 16 to 64) smoking to 33% by 2005 and 31% by 2010. In 1995, 35% of adults reported that they smoked but the most recent figure, cited in the CMO report (2003) shows that there has been a slight decrease in smoking prevalence to 33% of men and 29% of women. These statistics show that the original 2010 target has been met. The target has now been revised to 29%. But smoking rates are still well above the UK average of 26%.

**43.** The Scottish Executive has also set a target to reduce the proportion of women who smoke during pregnancy to 23% by 2005 and 20% by 2010. The most recent figures (2002) show 27% of women smoked during pregnancy.

### Smoking among young people

**44.** The Scottish Executive has set a target of reducing smoking among young people (aged 12 to 15) to 12% by 2005 and to 11% by 2010. The basis for reporting the proportion of young adults who smoke has changed. The 1998 Scottish Health Survey reported that 8% of boys and girls aged 13 to 15 had smoked in the previous week.

**45.** As part of the Scottish Health Survey smoking data is validated by collecting and analysing saliva samples to determine whether there are traces of cotinine.<sup>13</sup> This saliva analysis suggests that the number of young people (aged 13 to 15) actually smoking may be higher than levels indicated from self-reporting in the survey at 16% for boys and 15% for girls.

### Diet

**46.** People's health is greatly affected by what they eat. In Scotland, eating habits are the second major cause of poor health (after smoking). The national diet contributes to a range of serious illnesses, which include coronary heart disease, certain cancers, stroke, osteoporosis and diabetes.

### Healthy eating

**47.** National dietary targets were set out in the Scottish Diet Action Plan<sup>14</sup> and confirmed in *Towards a Healthier Scotland*. Targets were set for 2005 and include to:

- double the average consumption of fruit and vegetables (to 400 grams per day)
- increase by nearly half the intake of bread (mainly through wholemeal and brown breads)
- double the intake of breakfast cereals to 34 grams daily
- increase by a quarter the intake of complex carbohydrates (potatoes, pasta and rice)
- reduce the proportion of energy accounted for by total fat to 35% and saturated fatty acids to 11%
- reduce the average salt intake by over a third
- double the consumption of oily fish.

**48.** The 1998 Scottish Health Survey reports that nearly half of men (46%) and nearly six in ten women (59%) eat fresh fruit at least daily. But 29% of men and 19% of women eat fresh

9 *Towards a Healthier Scotland – A White Paper for Scotland*, The Scottish Office, 1999.

10 *Health in Scotland 2003*, Scottish Executive, 2004 and *Health in Scotland 2002*, Scottish Executive, 2003.

11 *Cancer in Scotland – Action for Change: Annual Report 2003*, Scottish Executive, 2003.

12 *A Breath of Fresh Air for Scotland*, Scottish Executive, 2004.

13 Cotinine is a chemical that is made by the body from nicotine, which is found in cigarette smoke. Since cotinine can only be made from nicotine, and since nicotine enters the body with cigarette smoke, cotinine measurements can show how much cigarette smoke enters your body.

14 *Eating for Health: A Diet Action Plan for Scotland*, The Scottish Office, 1996.

fruit once a week or less. Around half of children eat fresh fruit or vegetables daily.

### Obesity

**49.** Obesity is a risk factor for a number of serious chronic illnesses including heart disease, diabetes, high blood pressure, stroke and cancer. Obesity has been described as a modern day epidemic. Its prevalence has increased over the last twenty years and continues to rise. A recent report estimated the cost to the NHS in Scotland for treating obesity and its consequences as £171 million.<sup>15</sup>

**50.** The Scottish Health Survey 1998 reported that around one in five adults living in Scotland were obese (around 19% of men and 22% of women). A further cause for concern is the high proportion of men and women who are overweight, 43% and 32% respectively.

### Alcohol

**51.** Excessive drinking affects large numbers of the Scottish population, and there has been an upward trend in recent years, both among adults and young people. The Scottish Executive has set targets to reduce the incidence of adults exceeding weekly limits to 31% for men and 12% for women by 2005 with further reductions to 29% for men and 11% for women by 2010.

**52.** Until 1995, advice to adults on alcohol consumption was expressed in weekly consumption levels – 21 units for men and 14 units for women. Current advice on sensible drinking has been revised and is now expressed in terms of daily rather than weekly consumption to highlight the dangers of binge drinking. This new advice also reflects that

moderate consumption of alcohol may be beneficial for certain groups of the population. Current advice about sensible drinking is that:

- there is no significant health risk for men (of all ages) who regularly consume between three and four units a day and for women (of all ages) who regularly consume between two and three units a day
- regular drinking of four or more units a day for men, or three or more units a day for women, is likely to result in increasing health risk and is not advised
- the health of men aged over 40 and of post-menopausal women can benefit from drinking between one and two units a day.

**53.** The latest figures<sup>16</sup> show that 33% of men and 15% of women are exceeding the weekly limits for alcohol consumption. These figures show that since 1995 there has been no improvement for men and the percentage of women exceeding the weekly limits is increasing.

**54.** Daily drinking levels are reported in the 1998 Scottish Health Survey. The number of adults drinking alcohol in the past week is 82% for men and 68% for women, with 13% of men and 8% of women drinking alcohol every day. The survey also attempted to measure levels of binge drinking by asking how much people had drunk on their heaviest drinking day of the last week. The data show that 44% of men had consumed eight units or more on their heaviest drinking day and 27% of women had consumed six or more units on their heaviest drinking day. But the Scottish Health Survey states that this does not give sufficient

information to determine whether current advice on sensible drinking is being followed.

**55.** The Scottish Executive also set targets to reduce the incidence of alcohol consumption in young people. The Executive's target is to reduce the level of drinking in 12 to 15 year olds to 18% by 2005 (from 20% in 1995). Latest figures show that 12% of boys (aged 13 to 15) and 9% of girls had reported drinking alcohol in the last week.

### Exercise

**56.** Lack of physical exercise constitutes one of the most widespread causes of ill-health in Scotland. Research has demonstrated that inactivity leads to increased risk of coronary heart disease, stroke and many other health problems.

**57.** Scotland's national physical activity strategy *Let's Make Scotland More Active*<sup>17</sup> set targets of 50% of adults and 80% of children to meet the minimum recommended levels of physical activity for health by 2022. Minimum recommended levels of activity are 30 minutes per day of moderate physical exercise on five or more days per week for adults and one hour per day of physical activity on five or more days per week for children.

**58.** The latest data<sup>18</sup> for Scotland show that six out of ten men and seven out of ten women are taking less than the minimum recommended levels of physical activity. This pattern of inactivity extends to our children, with three in ten boys and four in ten girls falling short of the amount of physical activity required for good health.

<sup>15</sup> *The Cost of Doing Nothing – the economics of obesity in Scotland*, Dr Andrew Walker, 2003.

<sup>16</sup> *Health in Scotland 2002*, Scottish Executive, 2003.

<sup>17</sup> *Let's Make Scotland More Active*, Scottish Executive, 2003.

<sup>18</sup> *Health in Scotland 2002*, Scottish Executive, 2003.

# Part 3. NHS resources

## Key messages

The NHS in Scotland spent around £7 billion on providing healthcare services in 2002/03, around one third of the total funding available to the Scottish Executive.

Spending on the NHS in Scotland is increasing year-on-year and is significantly higher per head of population than in the rest of the UK. But there are cost pressures that could absorb much of this extra funding.

It is hard to match funding to improvements in performance with the current range of measures and difficulties in tracking money through the system.

Staff costs account for half of health spending.<sup>19</sup> Overall staffing levels are higher in Scotland than elsewhere in the UK with more consultants, General Practitioners (GPs) and

nurses per head of population but there is a commitment to increase NHS staffing further with targets for consultants, nurses and allied health professionals (AHPs). Alongside this there is a need to review roles and skill mix to make the most of existing staff.

## How much does the NHS in Scotland spend?

**59.** In 2002/03 £7 billion was spent on healthcare services. NHS boards and trusts spent most of this money. [Exhibit 2](#) shows the proportion of this money spent on health and community care and family health services. Most family health services expenditure was spent on drugs (£887 million), with £448 million for services provided by GPs, £194 million for dental care and £35 million for ophthalmic services. Spending on hospital and community health services includes over £2 billion on acute care, £800 million on mental

health services,<sup>20</sup> £200 million on maternity services, £320 million on continuing care, £460 million on other community services and £360 million on other healthcare.

**60.** The total amount spent has been increasing over the past seven years and this is set to continue up to 2005/06 ([Exhibit 3](#)). This represents an average increase of over 6% per year in real terms between 1999/2000 and 2005/06. Planned expenditure is expected to increase from £7 billion in 2002/03 to £8.7 billion in 2005/06 (£8.1 billion at 2002/03 prices). The additional expenditure is expected to contribute to improved patient services and healthcare.

## How is NHS funding shared among NHS boards?

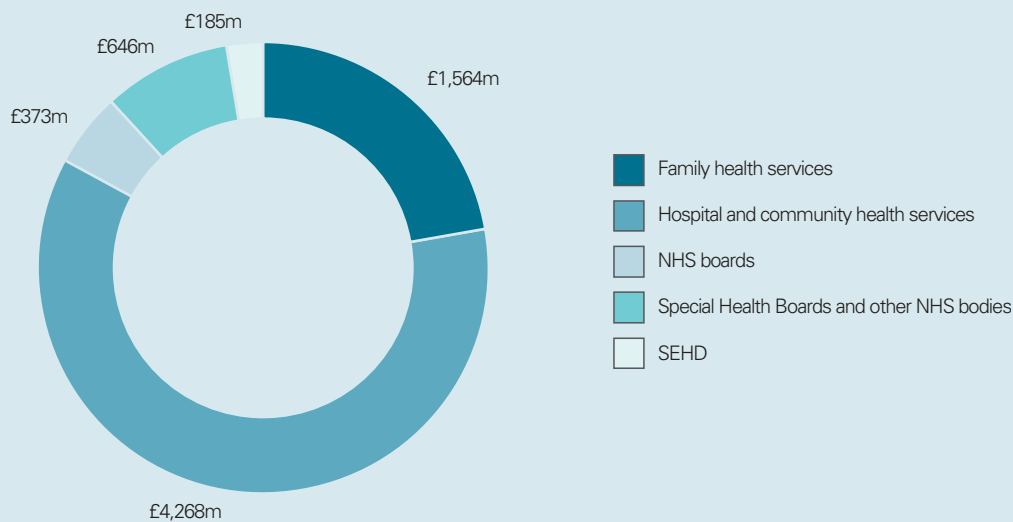
**61.** Allocations of funding to individual NHS boards are determined using the Arbutnott formula, implemented in 2000 following the work of a steering group chaired by Sir John Arbutnott.

<sup>19</sup> Staff costs in the primary care sector exclude the salaries of GPs, pharmacists, dentists and opticians who are independent contractors. The NHS in Scotland does not directly employ these contractors but they provide services on its behalf. If these contractors' salaries were included then overall pay costs would account for between 70 and 80% of total NHS costs.

<sup>20</sup> This sum includes spending on learning disabilities and geriatric continuing care.

### Exhibit 2

NHS spending in 2002/03 (£ million)



Source: NHS audited accounts 2002/03

### Exhibit 3

Revenue spending in NHSScotland (1995/96 to 2005/06)



Note: Figures for 1995/96 to 2002/03 are based on actual expenditure disclosed in audited accounts. Figures for 2003/04 to 2005/06 are based on planned expenditure. All figures are at 2002/03 prices (GDP deflator HM Treasury)

The Arbutnott formula takes into account the share of the population living in each NHS board area, the age structure of the population, levels of deprivation, and additional costs of providing health services in remote areas. When it was implemented the SEHD recognised that it would not be appropriate to reduce any NHS board's funding. Instead, all NHS boards receive a standard increase in funding so that they benefit from the growth in NHS expenditure. And those NHS boards whose 'Arbutnott' funding level is above their current funding receive a higher increase. SEHD intended for all NHS boards to reach their target share of funding in 2005/06. But they do not now think this is likely.

### Spending per head of population

**62.** Spending per head of population is set to rise from £1,400 in 2002/03 to £1,700 in 2005/06 (Exhibit 4). Both increased expenditure and the falling population account for this. The current population of Scotland is around 5.1 million, but if present trends continue the population may fall below 5 million by 2009,<sup>21</sup> largely due to a decrease in the birth rate.

**63.** Spending per head of population varies across the country from £1,034 in NHS Fife to £1,868 in NHS Western Isles. The three island boards have the highest spend per head of population; NHS Greater Glasgow is the next highest at £1,353.<sup>22</sup> This represents a variation of nearly 30% between NHS board areas. These figures are based on net operating costs and capital expenditure per head and do not directly compare to the £1,400 outlined above.

**64.** Spending per head of population in Scotland is higher than in England (Exhibit 5) and already matches the levels of healthcare expenditure in other European Union countries.

### New money

**65.** In September 2002, the Scottish Executive announced that an additional £2.7 billion would be invested in the NHS in the three years to 2005/06.<sup>23</sup> Amongst other things, the additional investment is to be used to:<sup>24</sup>

- develop and deliver health improvement action, in partnership with other departments and local authorities
- continue to support the drive for reform within the NHS in Scotland through the Centre for Change and Innovation
- invest in the improvement of the treatment of coronary heart disease, stroke, cancer and mental illness. Additional funding of £115 million has been identified specifically for the national clinical priorities of cancer, coronary heart disease and stroke for the three years to 2005/06. A further £12 million has been identified for suicide prevention
- treat additional hospital cases as outpatients, day cases or inpatients
- train an additional 10,000 nurses and midwives,<sup>25</sup> and increase the total number of consultants by 600
- improve patients' experience of the NHS by investing at least £250 million in hospitals, primary care facilities and information technology

- invest £30 million a year until 2005/06 to tackle the problem of delayed discharges by providing 1,000 community places for people leaving hospital.

**66.** The £2.7 billion additional investment is equal to £1.8 billion in real terms after it has been adjusted for inflation. But it is difficult to track whether the money is being spent on the intended areas. Some 'ring fenced' money is easier to track through the system, but this accounts for a small proportion of overall spending on NHSScotland. It is also too early to say whether the additional money has improved outcomes for patients. We will keep these areas under review in future overview reports.

### Future cost pressures

**67.** Spending on healthcare is outpacing economic growth in most OECD countries. Higher public expectations along with an ageing population, new health technologies and new drugs are all increasing costs.

**68.** There are also some specific cost pressures over the next few years which are likely to absorb much of the additional funding being made available to the NHS. These include spending on drugs which is growing at a faster rate than inflation, increased staffing costs due to pay modernisation, increases in staff numbers, and a revaluation of the NHS estate leading to higher capital costs. All of these pressures are influenced by external factors; for example, the pay modernisation packages for consultants, General Medical Services (GMS) and Agenda for Change are UK-wide initiatives.

21 *Scotland's population 2002*, General Register Office for Scotland.

22 *Scottish Health Service Costs 2003*, ISD.

23 *Building a Better Scotland: Spending Proposals 2003-2006: What the money buys*, Scottish Executive, September 2002.

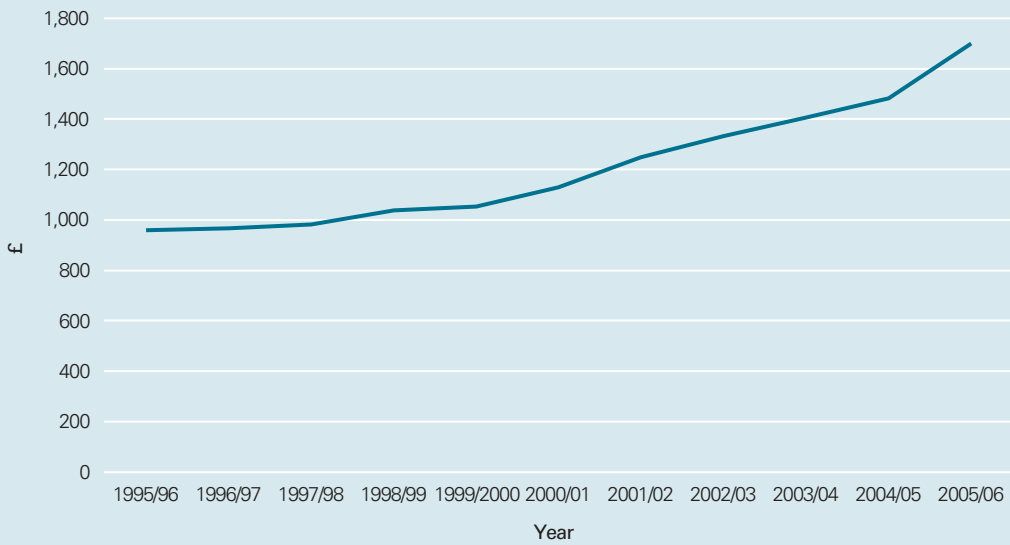
24 *Scottish Executive Draft Budget 2004/05*, Scottish Executive, September 2003.

25 This target was increased to 12,000 in *A Partnership for a Better Scotland*.



## Exhibit 4

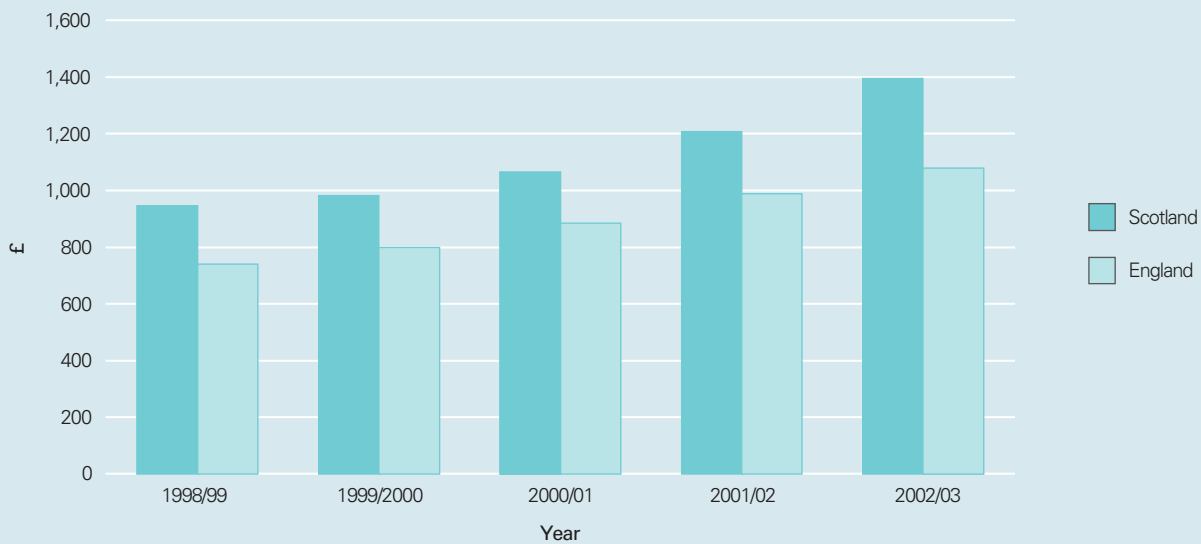
Spending per head of population in Scotland (1995/96 to 2005/06)



Source: Figures for 1995/96 to 2002/03 are based on actual expenditure disclosed in audited accounts. Figures for 2003/04 to 2005/06 are based on planned expenditure. All figures are at 2002/03 prices (GDP deflator HM Treasury). Population figures are based on GROS statistics.

## Exhibit 5

Expenditure on healthcare per head of population in Scotland and England (1998/99 to 2002/03)



Source: Office National Statistics (UK) and Audited Accounts (Scotland)

**69.** The following sections comment on the costs associated with each of these cost pressures. [Exhibit 6](#) provides a summary of the estimated costs for each cost pressure, provided by SEHD. The estimated total cost is £1,023 million. These figures are estimates and have not been audited by Audit Scotland. We will continue to monitor the estimates and may audit the figures in the future.

**70.** The Scottish Executive's additional investment in the NHS in Scotland of £2.7 billion is equivalent to £1.8 billion in real terms. The cost pressures summarised in [Exhibit 6](#) account for £1,023 million of this additional money. *Building a Better Scotland* identified that additional investment of £250 million would be made in primary care facilities and IT, and £90 million on tackling delayed discharges. All of this committed expenditure means that around £1.4 billion of the additional investment has already been accounted for. But this does not include estimated costs for implementing Agenda for Change or any additional costs arising from full compliance with the New Deal for junior doctors. The full effect of the cost pressures identified will therefore be higher than £1.4 billion.

### Spending on drugs

**71.** In 2002/03, the cost to the NHS in Scotland of prescription drugs dispensed by community pharmacists and dispensing doctors was £887 million, up 11% on the previous year. The total number of prescriptions dispensed went up 5% to 70 million. Drugs used to treat cardiovascular disease and mental health problems accounted for most of the increase in costs (£50 million).

**72.** The cost to the NHS of prescribed drugs has more than doubled in real

terms since 1989/90, and this trend is likely to continue. [Exhibit 7](#) shows the growth in prescribing expenditure since 1989/90.

**73.** Audit Scotland published *Supporting prescribing in general practice – a progress report*<sup>26</sup> in June 2003. The report concludes that trusts have made efficiency savings since 1999 but price changes make this hard to assess. It also identifies scope to make further efficiency savings of £14 million.

**74.** The NHS in Scotland spent £142 million on medicines in hospitals in 2001/02.<sup>27</sup> The proportion of hospital expenditure spent on medicines has been increasing for a number of years. Medicines prescribed to patients while they are in hospital may also affect the primary care sector but it is difficult to gather evidence to support this.

**75.** Audit Scotland is currently undertaking a review of using medicines in hospitals and will report our findings early in 2005.

### Increased staffing costs

**76.** The increase in these costs is associated with:

- The new consultant contract
- New Deal for junior doctors
- GMS contract
- Agenda for Change
- Targets for more doctors, nurses and AHPs.

**77.** The UK-wide pay modernisation initiatives announced in the *NHS Plan*<sup>28</sup> were in direct response to the government's proposals to modernise the NHS. The NHS pay system had

failed to keep pace with changes in NHS practice with flexible teams of staff working across traditional skill boundaries. The pay modernisation initiative aims to encourage service redesign and provide more effective systems of workforce planning.

**78.** Changes to contracts and additional staff will add significantly to the costs of NHSScotland. SEHD estimates that the NHS salary bill will increase by between £258 million and £432 million for each of the next three years. These estimates include the increased costs resulting from changes in national insurance and superannuation contributions.

### Consultant contract

**79.** In October 2003, a majority of consultants in Scotland voted to accept a new contract, which is being introduced on a UK-wide basis. The new contracts offer a higher starting salary, progression through a stepped scale of pay thresholds based on performance, and additional recognition for on-call and out-of-hours working. The new scale is significantly higher than current salaries. The minimum increase is £10,000 and the maximum is £17,000.

**80.** Average consultant earnings are likely to increase by around 20% as a result of the basic contractual commitments, according to current cost projections. The estimated cost of implementing the new consultant contract is £63 million in 2003/04, £85 million in 2004/05 and £100 million in 2005/06.

**81.** Those consultants who opted for the new contract prior to 31 December 2003 are entitled to receive their whole 2003/04 salaries in line with the new terms and conditions. The estimated cost for 2003/04 includes £53 million for this backdated pay.

<sup>26</sup> *Supporting prescribing in general practice – a progress report*, Audit Scotland, 2003.

<sup>27</sup> *Scottish Health Services Costs to 31 March 2002*, ISD, 2002.

<sup>28</sup> *The NHS Plan: A Plan for Investment. A Plan for Reform*, Department of Health, 2000.

## Exhibit 6

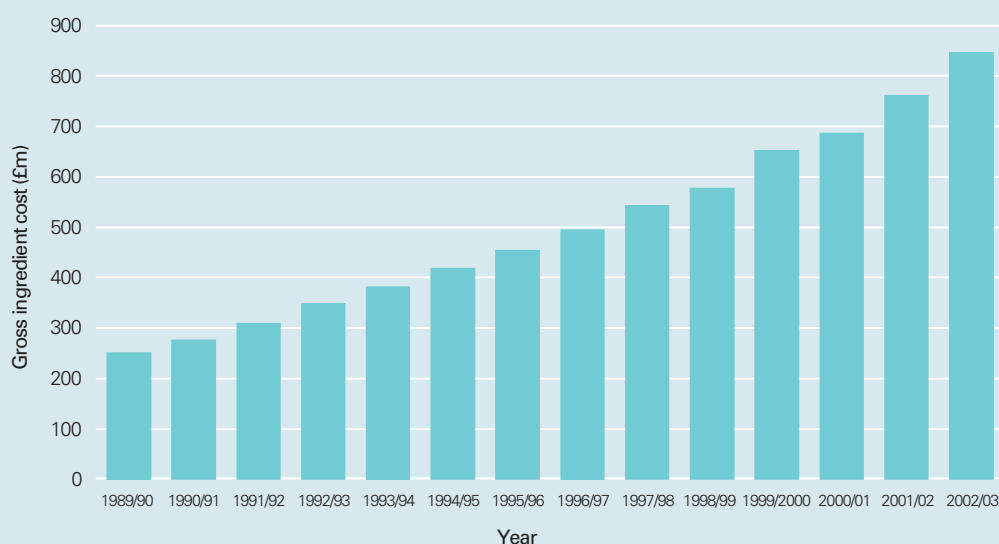
Estimated costs of future cost pressures (£million)

	2003/04	2004/05	2005/06	Total £m
	£m	£m	£m	
Drugs costs	80	80	80	240
Consultants contract	63	85	100	248
GMS contract		53	100	153
Out-of-hours		11	30	41
Increased staffing:				
600 consultants	13	38	63	114
12,000 nurses	24	50	77	151
1,500 AHPs	12	25	39	76
<b>Total</b>	<b>192</b>	<b>342</b>	<b>489</b>	<b>1,023</b>

Source: Scottish Executive Health Department

## Exhibit 7

Growth in prescribing expenditure (1989/90 to 2002/03)



Source: ISD

### New Deal for junior doctors

**82.** The New Deal is an agreement reached across the UK in 1991 between representatives of junior doctors, government and NHS management. It aims to limit the number of hours worked by junior doctors, and to improve their working conditions. Its objective is to improve the quality of patient care through having safe, well looked after and properly trained doctors. The need to reduce junior doctors' hours of work is driving programmes to modernise and re-engineer the delivery of hospital services.

**83.** From 1 August 2003 no junior doctor should have to work more than 56 hours a week, or 72 hours including on-call time. NHS boards are responsible for designing junior doctors' shift rosters that are New Deal compliant. If junior doctors work beyond the permitted threshold, boards have to pay salary enhancements for the additional time worked. The additional amount is payable not only to the individual working the extra time, but also to each doctor on their shift roster. Junior doctors' hours will be further reduced from August 2004 with the phased introduction of the EU Working Time Directive.<sup>29</sup> By 2009, no junior doctor should have to work more than 48 hours a week.

**84.** The financial consequences of New Deal arise from the need to pay salary enhancements and to recruit additional junior doctors so that compliant shift rosters can be established.

**85.** Between September 1999 and September 2003 the number of whole time equivalent junior doctors employed in the NHS in Scotland increased by 19% from 4,114 to

4,908. During the same period the total paybill for junior doctors increased from £177 million to £264 million, an increase of 49%. The number of junior doctors whose shifts complied with New Deal increased from 35% to 82% (and 97% compliance with New Deal requirements on number of hours worked). SEHD sees service redesign rather than more doctors as key to further increases in compliance with New Deal. It has been encouraging NHS boards to look at new ways of working and to produce compliant rotas through the development of new roles and responsibilities.

### GMS contract

**86.** In June 2003, GPs across the UK voted for a new GMS contract which was implemented in April 2004. Payments to GPs were previously made up of a capitation payment, based on the number of people registered, plus claims for items of service or treatments carried out.

**87.** Under the new contract GP practices will receive a lump sum based on a contract setting out the services to be provided. NHS boards will make additional payments if the GP practice provides more services, or the same level of service set out in the contract to an enhanced specification. Extra payments will also be made if quality standards are achieved. Until the system is fully operational it is difficult to judge the impact that these quality standards will have on the full cost of implementing the contract. But SEHD has anticipated that resources for general medical services will increase by £53 million in 2004/05 and by £100 million in 2005/06 compared to 2003/04 levels.

**88.** Under the new GMS contract GPs can opt out of providing out-of-hours services. NHS boards are now responsible for providing out-of-hours services for their patient population and most boards will start to implement these new arrangements from October 2004. Current estimates for the additional costs of out-of-hours services are £11 million in 2004/05 and £30 million in 2005/06.

### Agenda for Change

**89.** Agenda for Change is the UK-wide plan to introduce a new pay system for all NHS staff with the exception of doctors, dentists and the most senior managers. Subject to further staff ballots, SEHD expects that the new system will be implemented across Scotland from October 2004. The new system aims to harmonise conditions of service for staff. Staff will receive an annual pay increase and staff below the maximum pay point for their grade will receive an annual increment. The new pay system will also allow for salary enhancements in high cost areas, or where there is competition from outside the NHS.

**90.** A review of Agenda for Change is currently underway at a UK level. The purpose of this review is to assess progress in the early implementation and pilot sites in England and Scotland with a view to resolving any problems before the intended roll out later this year. The final shape and cost of Agenda for Change is subject to the outcome of this review. As UK-wide negotiations are still ongoing, the SEHD are not able to provide us with an estimate of the cost of implementing Agenda for Change. But given the number of staff involved it is expected to cost more than the new consultant contract.

<sup>29</sup> The EU Working Time Directive (93/104/EC) sets a maximum 48-hour working week averaged over a reference period and provides for minimum rest periods and annual paid holidays. The UK's regulations putting into effect the Directive came into force in October 1998. Staff can opt out of the 48-hour limit on their working week but the EC are currently considering whether to amend this provision. The EU Working Time Directive has significant implications for the NHS in Scotland in respect of junior doctors' and consultants' staff costs.

### Targets for more doctors, nurses and AHPs

**91.** NHSScotland is one of the largest employers in Scotland with around 147,000 staff (124,000 whole time equivalents (WTE)). Currently there are more hospital doctors, GPs and nurses per head of population than in England. Half of the total NHS budget – £3.1 billion – is spent on pay but the proportion varies in the primary care and acute sectors. In the acute sector, pay costs account for between 70% and 80% of total costs. In the primary care sector they account for less than 40%. This difference is due to family health services being delivered by GPs, dentists, pharmacists and opticians who are, in the main, independent contractors and are not directly employed by NHSScotland. If the cost of these independent contractors is included, pay costs in the primary care sector would also be around 70% to 80%.

**92.** The Scottish Executive is committed to increase NHS staffing further:<sup>30</sup>

- 600 extra consultants by 2006
- 12,000 more nurses and midwives by 2007<sup>31</sup>
- 1,500 more AHPs by 2007.

**93.** These targets are based on headcount not whole time equivalent.<sup>32</sup> Further information on these and other staff groups is contained within the *Scottish Health Workforce Plan*.<sup>33</sup>

**94.** There are problems with the targets as they stand:

- The targets were originally set in 2003 but the definition of headcount was not specified until April 2004 when the SEHD published its *Scottish Health Workforce Plan*.
- Some specialties and professions have worse shortages than others, but the targets do not specify which should be prioritised.
- Some areas of the country have more serious problems recruiting and retaining staff than others, but the targets do not specify where staff should be located.
- It is difficult to know the effect of a headcount target on staffing numbers and service provision. Whole time equivalent is normally used as measure for staffing.

We comment on this further when discussing each of the targets below.

**95.** New posts can be funded but there may be difficulties in filling them if qualified staff are not available. This is a problem across the UK and requires integrated work on a number of fronts: workforce planning; more training places for key staff groups; changes in skill mix and flexible working arrangements. An ageing workforce will also affect workforce planning, particularly in community nursing and general practice.

**96.** The Health Minister has indicated that the Scottish Executive is promoting an integrated approach to workforce planning and development at local, regional and national levels.<sup>34</sup>

It is investing £1.2 million annually for three years, beginning in 2003/04, to improve workforce planning and development across NHSScotland. We will review progress with workforce planning as part of our continuing work on staff governance.

### Consultants

**97.** The NHS in Scotland employs around 9,239 doctors of all grades in hospitals (8,419.4 WTE).<sup>35</sup> The main grades of doctor from training grades onwards are House Officer, Senior House Officer, Specialist Registrar and Consultant. The number of doctors employed in hospitals has increased by around 26% since 1995.

**98.** NHSScotland employs nearly 3,750 (3506 WTE) consultant grade doctors with around 3,500 (3270.6 WTE) employed in hospitals. The number of consultants employed has increased by around 31% since 1995. [Exhibit 8 \(overleaf\)](#) shows the trend in the number of consultants and the continued growth needed to achieve the target of 600 more in the three years to 2006.

**99.** The cost of recruiting an extra 600 consultants is estimated to be £13 million in 2003/04 and a further £25 million in each of the following two years, based on the new pay scales. In addition to their basic salary, some consultants are also entitled to distinction awards, which amount to around a 5% increase on the total consultant payroll.

**100.** The number of established posts for consultant grade has increased by around 4% for each of the last two years but vacancy rates are also rising. The vacancy rate has been increasing by around 1% each year for the last

30 *A Partnership for a Better Scotland*, Scottish Executive, 2003.

31 The 12,000 additional nurses include 10,000 being trained (as specified in *Building a Better Scotland*) and a further 2,000 being recruited.

32 Headcount refers to the actual number of staff employed whether they work full or part-time. Whole time equivalent is the number of staff expressed in relation to the standard weekly hours (full-time) for that category of staff.

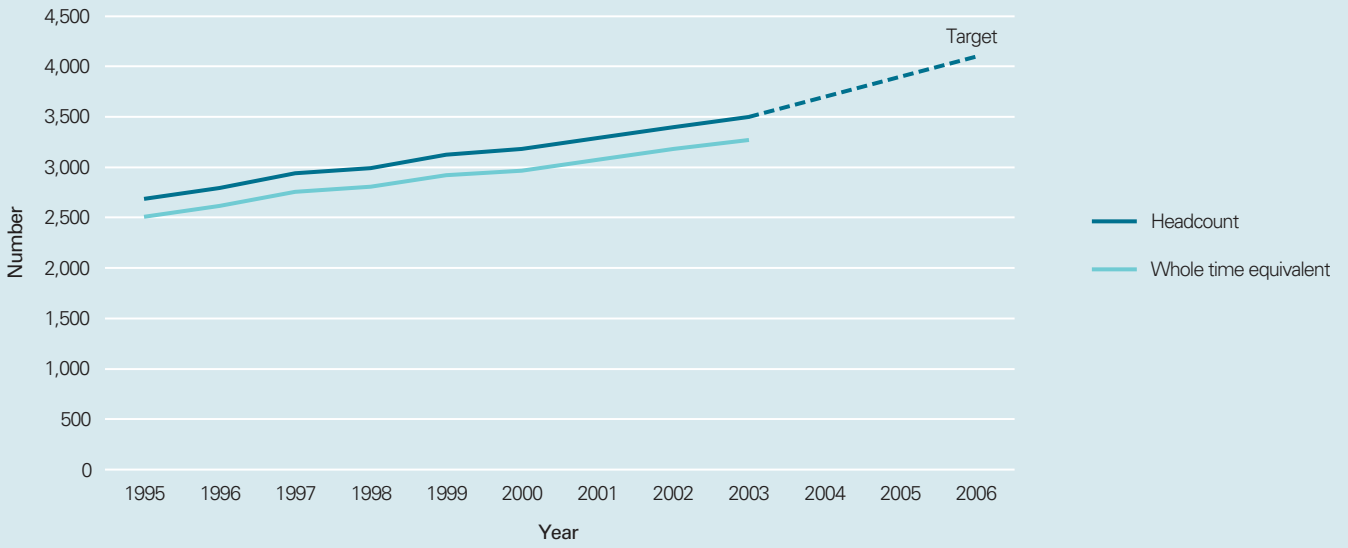
33 *Scottish Health Workforce Plan - 2004 baseline*, Scottish Executive, 2004.

34 Written response to question raised by Richard Lochead MSP, 13 November 2003.

35 *ISD Workforce Statistics at 30 September 2003*, ISD.

### Exhibit 8

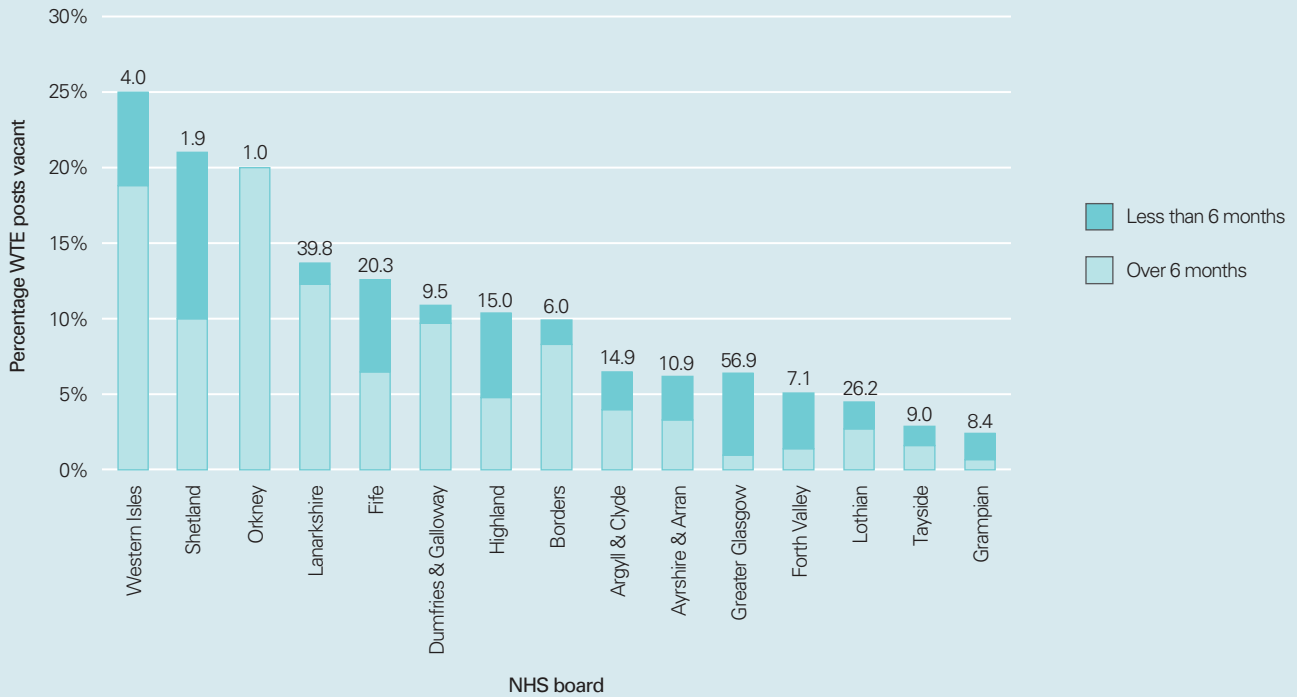
Number of consultants (Headcount and WTE from 1995 to 2003)



Source: ISD

### Exhibit 9

Percentage of established WTE consultant posts vacant by NHS board area (2003)

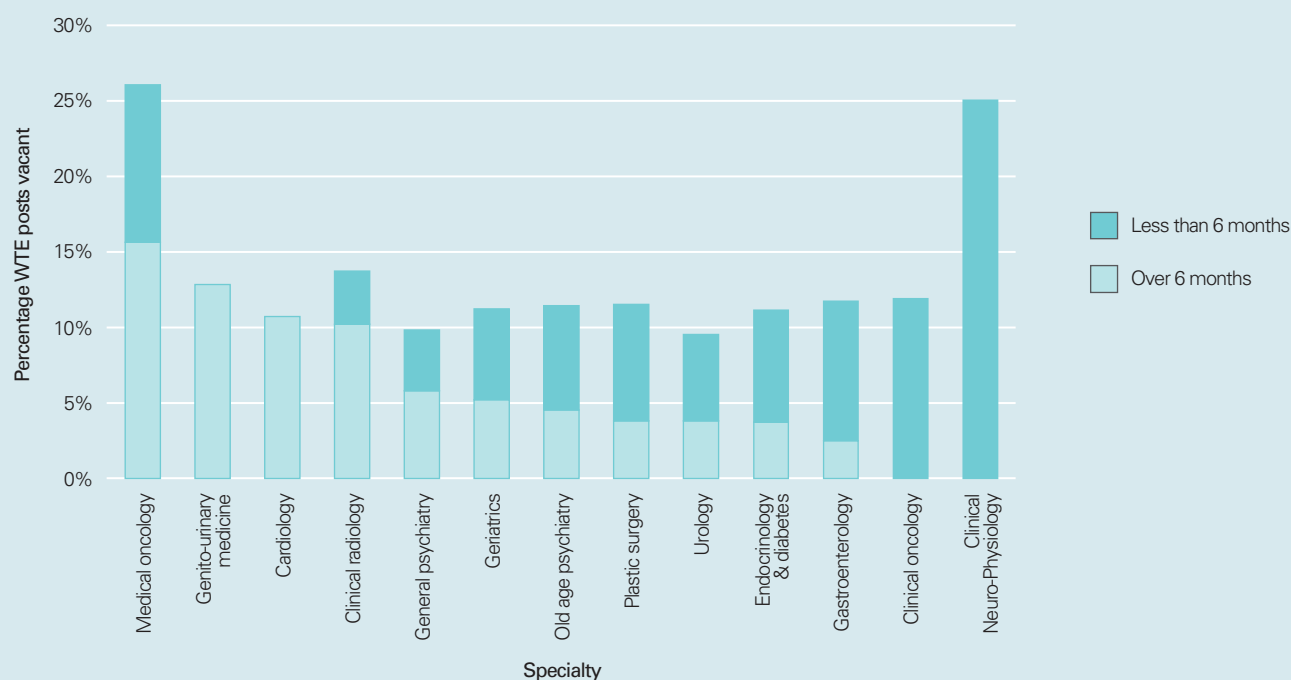


Note: The numbers at the top of each column indicate WTE posts vacant.

Source: ISD

## Exhibit 10

### Percentage of vacant consultant posts (WTE) for selected specialties (2003)



Source: ISD

three years. NHSScotland currently has the highest level of vacancies at consultant grade since 1999. Workforce statistics for 2003 show a vacancy rate of 6.5% based on the number of established headcount posts (6.7% on WTE). This is equivalent to 235.4 WTE (240 headcount) consultants. And 3.5% of posts have been vacant for six months or more. To achieve the target of an additional 600 consultants by 2006 NHSScotland needs to fill all of these vacant posts as well as the new posts. The NHS has started to recruit more consultant grades but with the number of vacant posts rising it is difficult to tell whether this target will be met.

**101.** Although the SEHD target does not specify where these consultants should be employed, filling the existing vacancies will be a challenge for some NHS board areas. [Exhibit 9](#) shows the trend in consultant vacancies in different NHS board areas in 2003. Filling consultant vacancies may be problematic for rural boards, such as the three island

boards, but they have relatively small numbers of posts to fill. Other boards have much larger numbers of consultant vacancies. For example, NHS Lanarkshire and NHS Greater Glasgow need to recruit 39.8 and 56.9 WTE consultants respectively to meet their baseline establishment.

**102.** The Executive's target does not specify the specialties to which consultants should be recruited. Latest data shows that some specialties are experiencing more serious problems than others. In particular, specialties relating to the national priorities of cancer and coronary heart disease have large proportions of vacant consultant posts. Cardiology, medical oncology, clinical radiology and clinical oncology all have significant vacancy problems ([Exhibit 10](#)). For example, medical oncology currently has 26% of consultant posts vacant, with 16% vacant for six months or more. Cardiology is suffering similar problems with nearly 11% of posts vacant for six months or more. These vacancies may result in future

problems for NHSScotland in meeting waiting times and other targets.

#### Nurses and midwives

**103.** In 2003, NHSScotland employed 64,300 nurses and midwives (54,120 WTE) costing approximately £1.3 billion.<sup>36</sup> Just over two-thirds of these nursing staff are qualified; the remainder are unqualified staff such as nursing assistants and nursery nurses. The majority of these staff work in hospitals (53,480 people, 45,779 WTE) with a further 9,350 (7,216.7 WTE) based in the community.

**104.** The Scottish Executive has set a target of recruiting and training 12,000 qualified nurses and midwives by 2007. But this is not a net growth target, which means that some of these 12,000 staff will replace staff leaving the NHS. Neither does the target specify at which grades, or to which specialty or area these staff should be recruited. The SEHD has estimated the cost associated with meeting this target at around £151 million over the three years to 2005/06. This sum of money is equivalent to around 4,500 WTE nurses.

**105.** This is an ambitious and challenging target for the NHS in Scotland. The Royal College of Nursing<sup>37</sup> recently reported that the number of nurses in Scotland has increased by less than 5% since 1999, compared to 11% in England, 8% in Wales and 6% in Northern Ireland.

**106.** The numbers of vacant nursing and midwifery posts are at the highest level since 1999 at around 3.5%, equivalent to around 1,950 posts in total, including approximately 1,500 qualified posts. But the NHS in Scotland is not experiencing the same problems with nursing and midwifery staff as with consultant medical staff. Vacancy rates are fairly constant across the country and only a few specialties – Intensive Therapy Units and theatres – have vacancy rates significantly higher than average.

**107.** It is too early to say whether the target of bringing 12,000 nurses and midwives in to NHSScotland by 2007 will be met. But slower recruitment than our UK counterparts and the existing level of vacancies make this a particularly challenging target.

### Allied Health Professionals

**108.** NHSScotland employs a total of 9,894 (8,141.4 WTE) Allied Health Professionals (AHPs). Nine professions make up the AHP workforce including chiropodists and podiatrists, dieticians, occupational therapists, physiotherapists and speech and language therapists. Each offers a range of services to help children and adults overcome illness and live with disability. A full list of AHPs and their main functions is included in Appendix 2.

**109.** The number of AHPs has increased by around 37% since 1995, and by 18% since 1999. Vacancy rates for AHPs currently stand at 6% across all professions. This is equivalent to 500 WTE posts.

**110.** The Scottish Executive made a commitment to recruit a further 1,500 AHPs in Scotland by 2007. The Health Minister announced, in June 2003, a number of measures aimed at encouraging AHPs to return to practice in Scotland. The published data do not allow us to comment on whether the NHS in Scotland will achieve this target. The estimated cost of recruiting an additional 1,500 AHPs is around £76 million over the three years to 2005/06.

**111.** The target does not specify which professions should be recruited, but some professions have higher vacancy rates than others. There are particular problems in recruiting radiographers and unqualified speech and language therapists, with vacancy rates of around 10% and 12% respectively.

### General practitioners

**112.** The GMS contract, and healthcare developments more generally, highlight the important role that GPs and primary care services play in supporting patients with chronic health conditions in the community.

**113.** The Scottish Executive has made a commitment to recruit and retain GPs but it has not specified a number or timescale.<sup>38</sup> The number of GPs in Scotland has been rising steadily since 1995 (*Exhibit 11*) with the latest figures reporting a total of 4,311 GPs (3546.1 WTE). But this represents an increase of only 5% since 1995 compared to a 26% increase in hospital doctors. This number of GPs equates to around 0.7 WTE per 1,000 of population for 2003, higher than the UK average.

**114.** The overall number of GPs is increasing, but their average age is also rising steadily. This will cause difficulties in the longer term unless younger doctors can be encouraged to become GPs. Recruitment and retention of GPs is a recognised problem, particularly in rural and island areas. The new GMS contract will change the way that primary care services are delivered. The new contract shifts the focus away from GPs as the sole provider to the practice team providing a range of services. General practice may become more attractive as a result of the new contract and the option for GPs to opt out of out-of-hours cover.

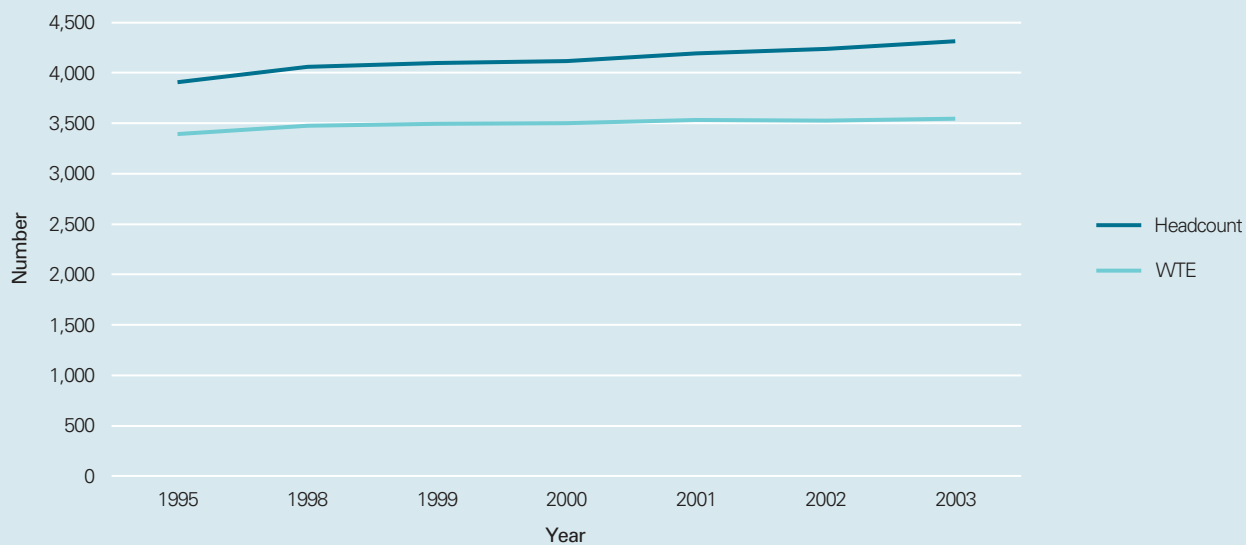
37 Royal College of Nursing, 15 March 2004.

38 *A Partnership for a Better Scotland*, Scottish Executive, 2003.



### Exhibit 11

Number of General Practitioners (1995 to 2003)



Source: ISD

### Exhibit 12

Number of dentists in NHSScotland (1992 to 2003)



Source: ISD

## Other NHS staff

### NHS dentists

**115.** People in Scotland suffer poorer dental health than many of our European neighbours, but a third of children and half of all adults in Scotland are not registered with a dentist.<sup>39</sup> Dentists are independent contractors who supply NHS dental services on behalf of NHS boards. The total number of dentists working in the NHS has increased every year since 1992 (Exhibit 12 page 23) but we do not know the amount of NHS work that these dentists undertake.

**116.** Despite this increase in the number of dentists many patients in Scotland are unable to access an NHS dentist in their area. The Scottish Executive<sup>40</sup> has made a commitment to continue increasing the number of dentists in Scotland and has announced a series of measures and initiatives to recruit more dentists and encourage them to take on more NHS patients. The financial incentives include remote area allowances and a general dental practice allowance. In addition, £3 million has been provided for general dental practice improvements in each of the last three financial years.

### Management and administration staff

**117.** The NHS in Scotland needs managers and administration staff to ensure that it runs effectively. NHSScotland employs 1,733 (1700.9 WTE) senior managers and 24,810 (20,960.3 WTE) administration and clerical staff. Since 1999 the number of senior managers has fallen by around 16% and the number of administration and clerical staff has increased by 24%. Management and administration staff cost around £364 million, an increase of around 30% since 1999, but has been falling as a proportion of total NHS costs.

39 ISD Scotland National Statistics Release.

40 Scottish Executive news releases SEHD582/2003 and SEHD620/2004.

## Part 4. NHS efficiency

### Key messages

Bed numbers are falling but Scotland still has more NHS beds per head of population than other UK countries.

NHSScotland's beds are used less intensively than in other UK countries. Low occupancy levels may indicate that the number of beds could be reduced further in some specialties.

The pattern of care in acute hospitals has changed over the last decade, with the last few years seeing an overall decrease in activity. Recent data indicate that all acute activity reduced in the last year.

There is a lack of data about the primary care sector, which makes it difficult to monitor changes in healthcare delivery.

### How efficiently does NHSScotland use its resources?

**118.** This part of the report examines a number of areas that provide an insight into how NHSScotland uses its resources, by looking at capacity (bed availability, occupancy levels and lengths of stay) and activity (inpatients, day cases and outpatients).

**119.** Much of the data currently collected reflect earlier patterns of care, and do not adequately measure modern clinical practice such as greater use of primary and community care settings or the provision of care by the wider clinical team.

### Capacity

#### NHS beds

**120.** NHSScotland has around 31,000 beds,<sup>41</sup> a reduction of 7,000 beds (19%) since 1998. This reduction has occurred in both the acute and continuing care sectors, over a range of specialties and consistently across the country.

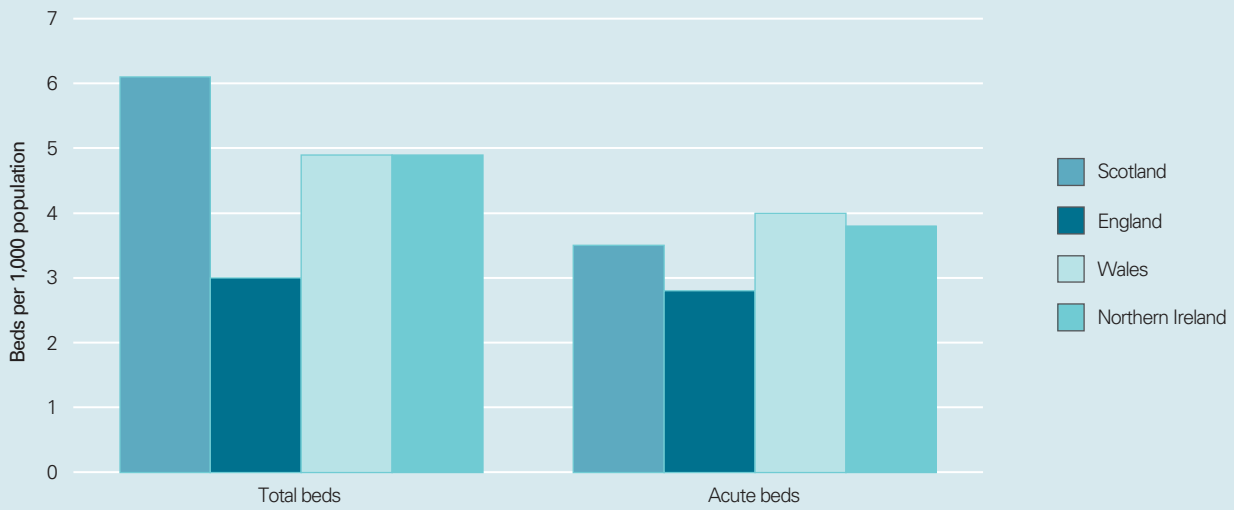
**121.** Although the number of beds is falling NHSScotland still has more beds per head of population than our UK counterparts. Scotland has around six beds per 1,000 population, twice the number of beds in England and 20% more than Wales and Northern Ireland. But acute beds show a slightly different picture, with more acute beds per 1,000 population in Wales and Northern Ireland but fewer in England. [Exhibit 13 \(overleaf\)](#) shows total and acute beds per 1,000 population for each of the UK countries.

#### Acute beds

**122.** Around 17,600 beds were available for acute specialties at the end of 2003. This represents a reduction of around 1,000 beds (5%) in the last five years. The overall reduction in acute beds is not necessarily a matter of concern, as new treatments and procedures allow patients to be treated as day cases, outpatients or within a primary care setting.

### Exhibit 13

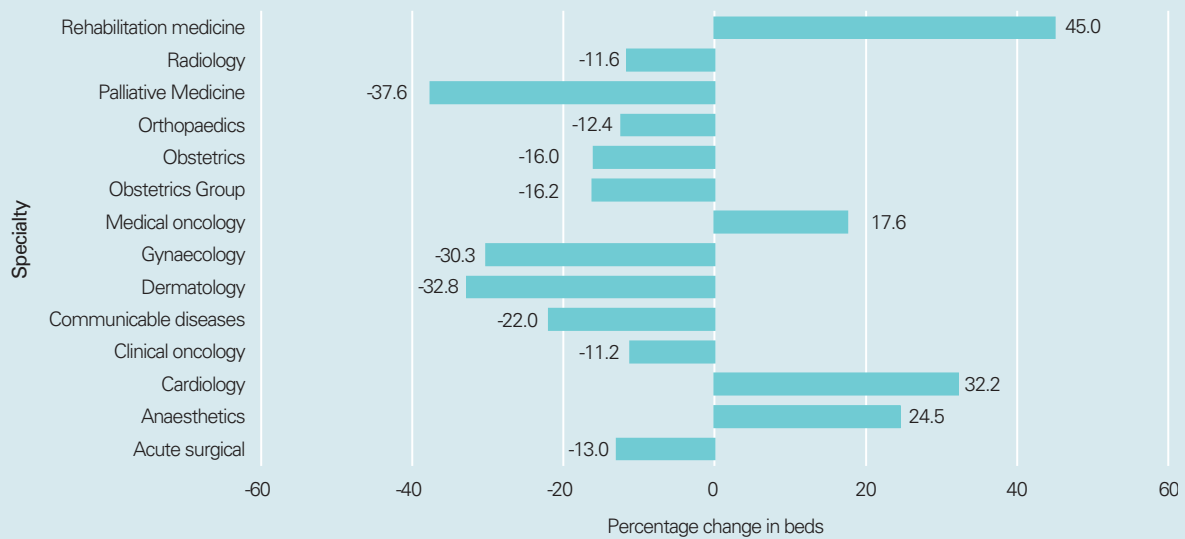
Total and acute beds per 1,000 population for UK countries



Source: Bed numbers are taken from national statistics releases from ISD Scotland, National Assembly for Wales and Department of Health, Social Services and Public Safety in Northern Ireland and the Chief Executive's report to the NHS 2003, Department of Health. Population figures are from The Prime Minister's office.

### Exhibit 14

Percentage change in bed numbers for acute specialties (1998 to 2003)



Source: ISD

**123.** Latest data show that the largest reductions in beds have occurred in acute surgery, general surgery, gynaecology, obstetrics, orthopaedics and palliative medicine. But there has been an increase in beds for general medicine, cardiology, cardiac surgery, medical oncology, and rehabilitative medicine. [Exhibit 14](#) shows the change in bed numbers over the five years 1998 to 2003 for these acute specialties.

### Continuing care beds

**124.** By far the largest reduction in beds has occurred in the continuing care sector for patients with mental health and learning disabilities. The number of available beds has reduced by over 6,000 beds (31%) in the last five years. The reduction in bed numbers has occurred in all continuing care specialties with the exception of forensic psychiatry, which has increased by 46%. This reduction in beds is in line with the government's care in the community policy, which states that all long stay hospitals for people with learning disabilities should be closed by 2005.<sup>42</sup> But Scotland still has more continuing care beds per 1,000 population than the rest of the UK.

### Bed occupancy

**125.** Scottish hospital beds are, on average, occupied 81.5% of the time, which is lower than in other UK countries. Latest figures for England show bed occupancy at 85.4%. Occupancy levels of 82% to 85% are generally accepted as reasonable for acute specialty beds.<sup>43</sup> But each NHS board needs to establish the levels of occupancy required for different specialties and types of care depending on their own particular circumstances. The right occupancy level will depend on a number of factors including the specialty, the balance between emergency and

planned admissions and the size of the hospital. Occupancy levels have increased only slightly over the last five years, suggesting that the NHS in Scotland does not have a problem with bed capacity overall. The average occupancy level for acute beds is slightly higher at 81.8%, an increase of 3.3% since 1998, but this will be due in part to the overall reduction in acute beds.

**126.** Occupancy levels can vary significantly among acute specialties, with some specialties operating at near full occupancy. For example, gastroenterology beds are occupied 95.5% of the time and respiratory medicine operates at 90.2% bed occupancy. Beds in other specialties are occupied much less of the time. For example, ear, nose and throat beds are occupied 58.3% of the time and gynaecology and obstetrics beds are occupied around 60% of the time.

**127.** The number of beds available within each specialty has changed, with some specialties increasing their beds while others reduce. But occupancy levels show that there may still be too many beds in some specialties.

**128.** Bed occupancy levels vary across the country, with the lowest occupancy in the three island boards. But for the majority of other NHS boards beds are occupied around 80% of the time. [Exhibit 15 \(overleaf\)](#) shows bed occupancy levels across the country in 2003.

**129.** NHS boards are taking capacity planning forward through their local acute services reviews. The SEHD recognises its responsibilities for ensuring that, as far as possible, capacity planning across Scotland is consistent and that plans in different

NHS board areas take account of their neighbouring NHS boards.

### Length of stay

**130.** The average length of stay for all inpatient discharges is around 5.7 days depending on the type of admission; emergency admissions result in a longer stay in hospital (6.9 days) than elective (or planned) admissions (3.4 days).

### Lengths of stay across the country

**131.** The length of time patients stay in hospital varies across Scotland ([Exhibit 16 overleaf](#)). The longest and shortest lengths of stay occur in trusts which may not be typical. The Yorkhill NHS Trust (4 days) provides only children's services, while Western Isles directly managed unit (11.8 days) faces the particular challenges of an island board. But a number of factors, such as case-mix, can affect length of stay. Most trusts have average lengths of stay between 5 days and 7.5 days. Teaching hospitals are more likely to have longer average lengths of stay than district general hospitals.

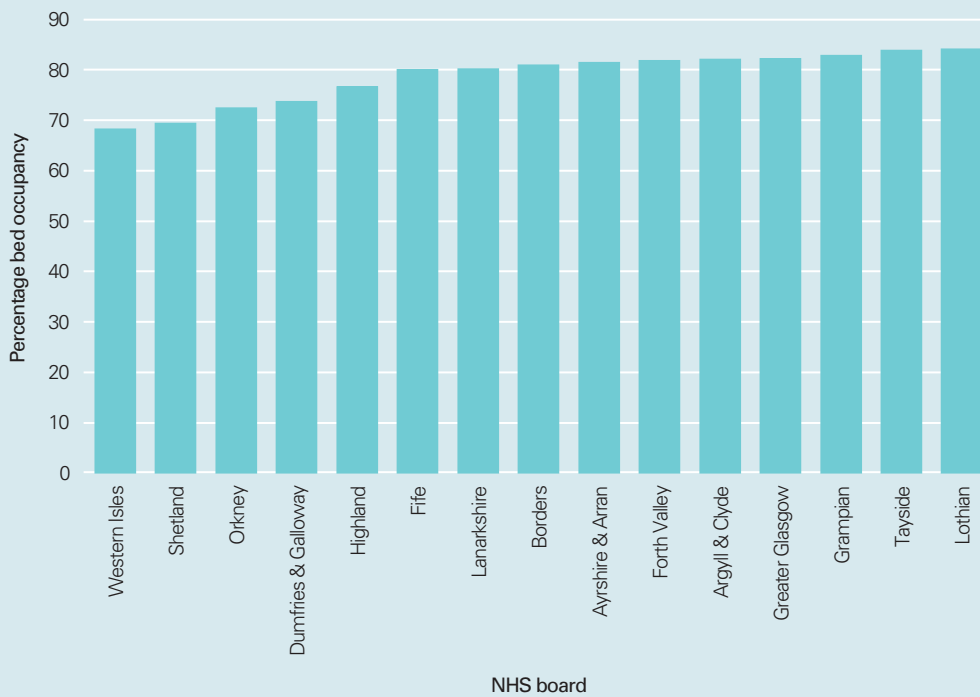
**132.** South Glasgow University Hospitals NHS Trust has a fairly high average length of stay (7.5 days). But it has improved in the past few years, reducing the average length of stay by a day since 1998/99. The directly managed units in Orkney and Shetland have also been successful in reducing their average lengths of stay, from 14.4 days to 9 days and 7.2 to 5.4 days respectively. However, some trusts, such as Lothian have seen the average length of stay increase.

42 *Same as You: A Review of Services for People with a Learning Disability*, Scottish Executive, 2000.

43 The Winter and Emergency Services Team at the Department of Health in England has estimated that a trust needs an average occupancy rate of 82% if it is to meet its demand on all but a few extreme days.

## Exhibit 15

Percentage bed occupancy for all NHS boards (2003)



Source: SKIPPER

## Exhibit 16

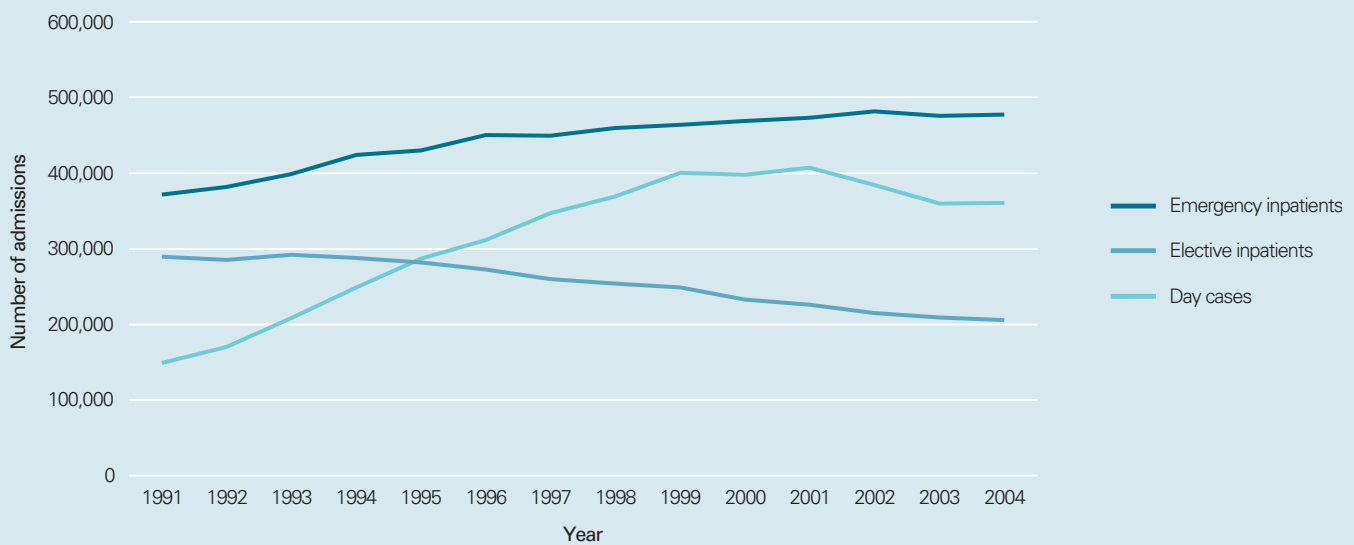
Average length of stay for emergency inpatients in acute trusts and directly managed units in 2002/03



Source: SKIPPER

## Exhibit 17

### Trends in acute activity (1991 to 2004)



Source: ISD

## Activity

### Inpatients and day cases

**133.** NHSScotland provided over a million episodes of acute care in 2002/03. This represents an increase of nearly 30% since 1991.<sup>44</sup> The total number of acute episodes peaked in 1999 and has gradually been falling over the last few years. In 2003/04, around 683,000 patients were discharged following an inpatient<sup>45</sup> admission. Of these 205,000 were planned (elective) admissions and 477,000 were emergency admissions. A further 360,000 patients were treated as day cases.

**134.** Data for the last year show that overall acute activity has reduced but there have been small increases in the numbers of day cases and emergency inpatients. The overall reduction in activity is likely to be a result of changes in clinical practice that reduce and prevent inappropriate admissions, more complex cases being treated and an ageing population. For example, in the

primary care sector an increasing number of clinics are held to manage chronic diseases. It could also be a result of better care, so that people recover from disease and avoid repeated admissions. There are also more alternatives to admission. Patient care is changing across Scotland but these changes are not currently captured by data collection systems and it is difficult to find evidence to demonstrate and explain what is happening.

**135.** Although the NHS in Scotland has increased overall activity levels in the last thirteen years, the pattern of admissions has changed (Exhibit 17). The number of elective inpatients has reduced by around 28% while the percentage of emergency inpatients has increased by the same amount. The increase in emergency admissions is accounted for mainly by older people. This is discussed further in Part 7. The number of day cases has increased significantly over the same period (141%) but they peaked in 1999 at around 400,000

and have slowly declined over the last few years.

**136.** The number of elective admissions has reduced as more procedures are undertaken as day cases. There has also been a move for some operations, such as cataract surgery and cystoscopy, to be performed in outpatients rather than as day cases or inpatients. But data systems are not keeping pace with service changes and so this activity information needs to be used with care.

**137.** Extra money is available to the NHS in Scotland to treat additional hospital cases as outpatients, day cases and inpatients, as part of the £2.7 billion investment announced in the Scottish Executive's 2004/05 draft budget. It would appear, however, that activity is reducing and it is not clear how this extra money is being spent. It may be that the cases being treated are more complex than before, but current data collection systems do not provide evidence to support this.

<sup>44</sup> *Acute Activity, Waiting Times and Waiting Lists and selected data developments information*, ISD, 2004.

<sup>45</sup> Inpatients are defined as patients who occupy available staffed beds in hospital and remain overnight. A day case is a patient who makes a planned attendance to a specialty for clinical care, sees a doctor or dentist, and requires the use of a bed or trolley. The patient does not remain overnight.

### Costs

**138.** The Scottish Health Service Costs Book (also known as the 'Blue Book') publishes costs for the NHS each year. These costs are based on figures provided by NHS bodies but there are questions about their reliability. For example, the average cost per case varies widely by hospital, by specialty and by NHS area. A number of factors influence the cost per case including the length of stay and case mix, so that comparing the average cost per case for inpatients and day cases can be misleading. They should therefore be used with caution.

**139.** This is an issue that NHSScotland needs to address. It is difficult to demonstrate value for money without accurate costs. We understand that SEHD is currently examining the scope for a national benchmarking exercise to improve the performance of the NHS in Scotland and identify opportunities to reduce costs. Comparisons will be made within Scotland and with England and other European countries.

**140.** Exhibit 18 shows the average cost per case for inpatients and day cases in each of the NHS board areas. Costs per case for inpatients and day cases vary widely across the country. The average cost per case for inpatients across Scotland is £1,744. Costs per case for inpatients range from £1,572 in NHS Argyll & Clyde to £2,099 in NHS Lothian, a variation of 34%. The cost per case for day cases averages £450, but there is a variation of 200%, from £248 in NHS Greater Glasgow to £746 in NHS Borders.

**141.** Taking maternity services as an example where general comparisons are possible, the cost per case for inpatients varies widely by NHS area and by hospital. Cost per case for maternity services by NHS board area ranges from £1,023 in NHS Argyll & Clyde to £1,918 in NHS Highland. In maternity hospitals the cost per case ranges from £1,009 to £1,683.

### Outpatients

**142.** Most people attending hospital are seen as outpatients. Around one million patients are seen as outpatients each year, of whom 300,000 are first outpatient appointments. There have been significant changes in outpatient services in recent years, and some patients are now treated in outpatients who would previously have been admitted to hospital. Many tests and treatments can now be carried out during an outpatient visit. Consultants run the majority of clinics in medical and surgical specialties, but other healthcare professionals including nurses, AHPs and technicians increasingly run clinics in other specialties.

**143.** According to national data, there were nearly 4.7 million attendances at outpatient clinics in 2002/03, a reduction of around 2% on the previous year. But a recent census<sup>46</sup> carried out by Audit Scotland indicates that the real scale of activity is significantly greater with more than ten million attendances. Each year three in ten outpatient attendances are first appointments, but around 12% of patients did not turn up for their first outpatient appointment in 2003. The percentage of patients failing to attend first outpatient appointments is increasing slowly each year.

### Costs

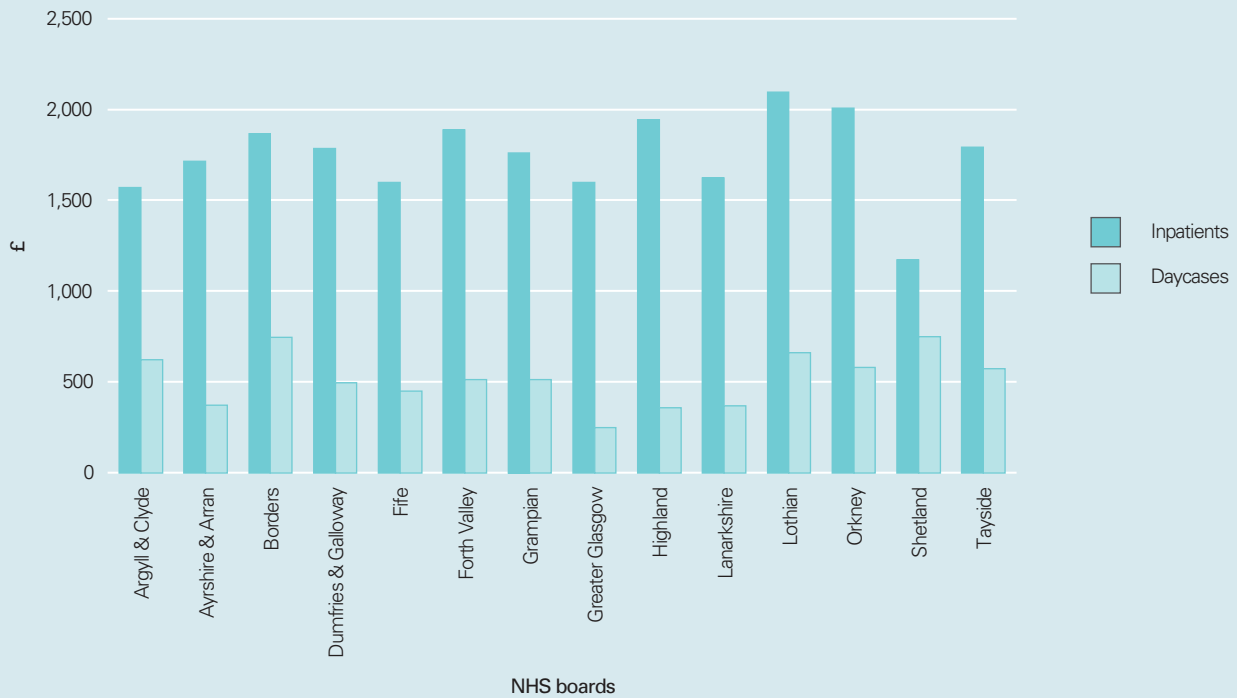
**144.** Costs per outpatient attendance vary by NHS board area, hospital type and specialty (Exhibit 19). Consultant led outpatient clinics generally cost more per attendance than those run by AHPs, but there are a few exceptions: North Glasgow University Hospitals, Dumfries & Galloway Acute and Maternity Hospitals and Orkney DMU have a higher average cost for AHP clinics than consultant led clinics. This discrepancy may be explained by the unreliability of some of the cost data included in the Blue Book.

<sup>46</sup> *Outpatients count: result of a census on outpatient activity*, Audit Scotland, 2003.



### Exhibit 18

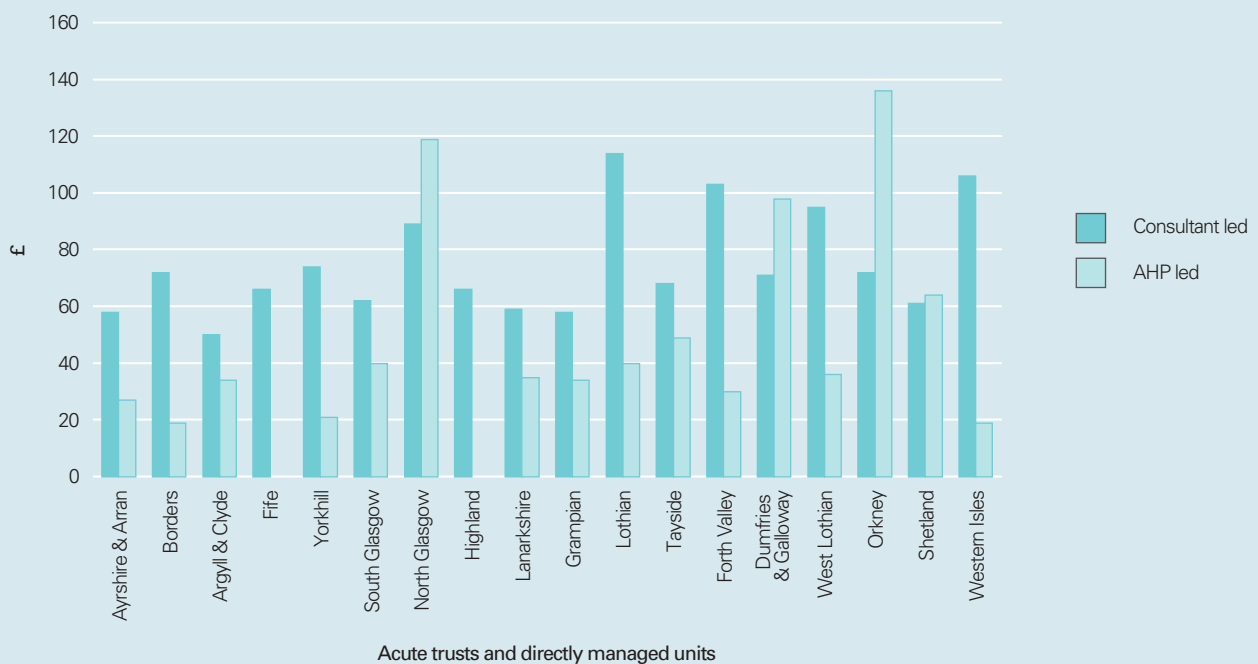
Average cost per case for inpatients and day cases by NHS board area (2002/03)



Source: ISD

### Exhibit 19

Average cost per attendance for outpatient clinics by acute trust and directly managed unit (2002/03)



Source: ISD

## Part 5. Waiting for care



### Key messages

Inpatient and day case waiting time targets are being achieved. But there is still work to be done to achieve the waiting time targets for the national priorities of coronary heart disease and cancer.

Over 87% of outpatients are seen within 26 weeks. This is an improvement but it is too early to say whether the NHS in Scotland will achieve the Executive's target by the end of 2005.

The Golden Jubilee National Hospital treated 9,300 patients in the nine month period to March 2003, some 85% more than the number of procedures it was expected to perform.

### How long do people wait for care?

**145.** The Scottish Executive made a commitment to minimise delays and reduce the time that patients have to wait for treatment in *Our National*

*Health*. A number of targets have been set for patients accessing acute care, whether as an inpatient, day case or outpatient. Commitments have also been made for access to primary care. This part of the report comments on the performance of NHSScotland on these targets, and on actions taken to achieve the targets and address particular problem areas.

**146.** In 2002, the SEHD established the National Waiting Times Unit to help with local waiting times problems and speed up treatment. In June 2002, the Scottish Executive purchased the former HCI hospital in Clydebank (renamed the Golden Jubilee National Hospital) and established the National Waiting Times Centre (NWTC) as a special health board. The NWTC is responsible for ensuring the hospital operates effectively to assist in the management of waiting times for NHS patients.

**147.** Waiting times have attracted substantial investment by the Scottish Executive. In 2002,

£20 million was allocated to tackle waiting times in general, £15 million of this money was given to NHS boards to help achieve the 2003 targets and a further £5 million to the National Waiting Times Unit to tackle specific bottlenecks. A further £4 million was allocated to NHS boards in 2002 to speed up waiting times for hip and knee surgery. In its first nine months (to 31 March 2003) the NWTC also spent £17 million. During the period to 31 March 2003, the Golden Jubilee National Hospital treated 9,300 patients, some 85% more than the target.

**148.** Audit Scotland published a review of the management of waiting lists in Scotland<sup>47</sup> in June 2002. Our main recommendations were that all patients waiting for services should be entered on to a common waiting list and waiting times on the deferred list should be monitored routinely. In November 2002, following a Scottish Executive action plan, the Minister for Health and Community Care announced that a single list system would come into force on 1 April 2003.

## Exhibit 20

### Waiting times targets and performance for coronary heart disease (December 2003)

Target	Number of patients on list	Number waiting more than 12 weeks (8 weeks) for angiography		Number waiting more than 24 weeks (18 weeks) for surgery	
		12 weeks	8 weeks	24 weeks	18 weeks
By the end of 2004 the maximum wait for angiography will be 8 weeks from seeing a specialist.	1,095	5 (0.5%)	88 (8.0%)		
By the end of June 2004, the maximum wait for surgery (cardiac revascularisation) will be 18 weeks from the time of angiography.	921			Nil	48 (5.2%)

Source: ISD

### Waiting times

#### Inpatients and day cases

**149.** The Scottish Executive's target is that by 31 December 2003 no patient with a guarantee<sup>48</sup> will wait longer than nine months for inpatient or day case treatment. This target will reduce to six months from 31 December 2005. If a patient's host NHS board is unable to provide treatment within the target time, the patient will be offered treatment elsewhere in the NHS, in the private sector in Scotland, in England or overseas.

**150.** The latest data show that the 2003 target was achieved, and that 86% of patients were seen within six months. But orthopaedics, plastic surgery and general surgery specialties are facing capacity pressures.

**151.** At December 2003 there were around 112,000 people on the waiting list for inpatient and day case treatment, 2.9% higher than the same quarter in the previous year. The median waiting time of 40 days has also increased, being six days longer than the same quarter in 2002.

#### Outpatients

**152.** The Executive's target is that by 31 December 2005 no patient should wait more than six months (26 weeks) for a first outpatient appointment with a consultant following referral by GP or dentist. In the quarter to 31 December 2003, over 87% of patients were seen within 26 weeks.

#### Waiting times for the national priorities

**153.** The NHS in Scotland has specific targets for some of the national priorities including coronary heart disease and cancer.

#### Coronary heart disease

**154.** The Scottish Executive has set specific targets for coronary heart disease treatments. Performance against these targets is measured and reported on a quarterly basis. [Exhibit 20](#) sets out the targets and latest performance data (as at 31 December 2003).

**155.** The target for cardiac revascularisation has recently been brought forward from December 2004 as a result of the significant reductions in waiting times in recent months.

<sup>48</sup> There are certain specified circumstances where it may not be possible to meet a waiting time standard. For example, where a patient has asked for a delay to admission or where, after discussion, the treatment has been judged to be low clinical priority. These are recorded as Availability Status Codes (ASC).

## Cancer

**156.** The Scottish Executive has also set targets for waiting for cancer treatment:

- No patient should wait longer than two months from urgent referral to treatment by 31 December 2005. There are no published data against the target deadline.
- From October 2001, women with breast cancer who are referred for urgent treatment should begin treatment within one month of diagnosis, where clinically appropriate. The most recent report shows that 81% of women who have breast cancer begin their treatment within one month of diagnosis, where clinically appropriate.

## Primary care access

**157.** From 1 April 2004 anyone contacting a GP surgery should have access to a GP, nurse or other healthcare professional within 48 hours. The target is part of the new GMS contract and will be monitored through the quality and outcomes framework. This is a new target and no data are yet available on performance.

# Part 6. Outcomes

## Key messages

Every year cancer, coronary heart disease and stroke account for 65% of all deaths in Scotland. Health outcomes have improved continuously since the NHS was established. The rate of improvement shows no sign of slowing. But we still lag behind our European counterparts.

The main reasons for better outcomes include:

- lifestyle changes
- better and earlier diagnosis
- improved surgical techniques and equipment
- better anaesthetics
- improved drugs to treat and prevent disease.

Mental health has been a clinical priority for the Scottish Executive for a number of years but its reported incidence continues to rise. One in four of us are likely to suffer from a mental health problem sometime in our lives. The Executive's main target for mental health is a reduction in deaths from suicide. This target is, at best, a partial indicator for mental health and the Executive should consider developing other targets.

## Are outcomes improving on the national clinical priorities?

**158.** The Scottish Executive has identified its clinical priorities as cancer, coronary heart disease and stroke and mental health. In this chapter we discuss how NHSScotland is performing against each of these clinical priorities, showing Scottish trends over time and by NHS board (where applicable), and comparisons with international countries.

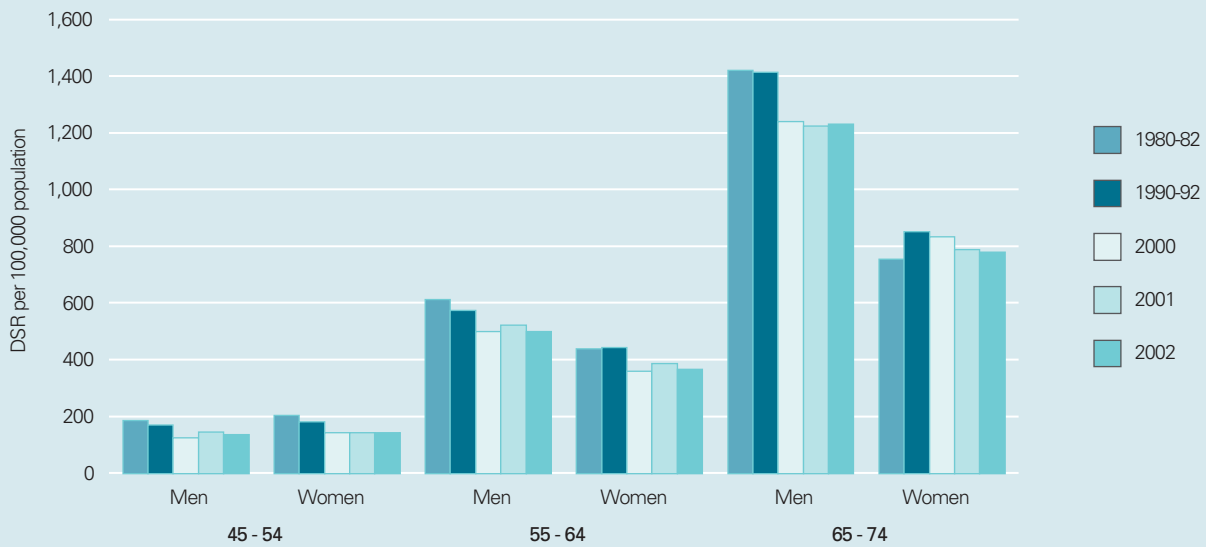
## Cancer

**159.** Each year, more than 26,000 people in Scotland are diagnosed with cancer and 15,000 people die from it.<sup>49</sup> The Scottish Executive's cancer strategy *Cancer in Scotland: Action for Change* acknowledged the historic under-investment in cancer care in Scotland, and set out a modernisation agenda.

**160.** The strategy was supported by additional funding of £60 million up to the end of 2003/04. To date this additional investment has resulted in the appointment of at least 330 new staff including nurses, radiographers, pharmacists and consultants. It has also provided additional MRI and CT scanners, ultrasound, endoscopy and chemotherapy equipment.<sup>50</sup> From April 2004, the £25 million annual cancer investment will be included within NHS boards' unified budgets, but it will continue to be ring-fenced for cancer services until 2005/06 when the position will be reviewed.

## Exhibit 21

Death rates from cancer per 100,000 population for men and women aged 45 to 74 (1980 to 2002)



Source: GROS

### Deaths from cancer

**161.** The Scottish Executive has set a target to reduce the number of deaths from cancer in the under 75s by 20% between 1995 and 2010.

**162.** In 1995, one in four deaths in Scotland was from cancer. Mortality rates from cancer have reduced by over 10% between 1995 and 2002<sup>51</sup> and if this trend continues the target will be met. The most significant improvement has been made in the age group 65 to 74 years (Exhibit 21).

**163.** The number of cases diagnosed is predicted to increase, from 25,800 cases per annum seen in 1995-97 to 33,000 each year in 2010-14.<sup>52</sup> This will create significant medium-term pressures on cancer services.

**164.** The most common cancers in Scotland are lung, prostate and colorectal in men and breast, lung and colorectal in women.

### Lung cancer

**165.** Lung cancer is the single largest avoidable cause of cancer death. It is generally accepted that at least 80% of lung cancer deaths are smoking related. There is good evidence that as soon as a smoker quits smoking, even in middle age, he or she begins to win back the life expectancy lost through smoking.

**166.** In Scotland death rates have fallen by around 16% for men between 1992 and 2002. However for women mortality increased by 6%. Lung cancer mortality rates for women living in Scotland are the highest in Western Europe and have been for a number of years.<sup>53</sup>

### Breast cancer

**167.** Deaths from breast cancer in Scotland fell by 12% between 1992 and 2002. This reduction is less than that achieved by our UK counterparts, but Scotland has improved against France and Germany. Scottish

mortality rates are not the highest in Western Europe but are close to the top of the range.

### Colorectal cancer

**168.** Colorectal cancer is the third most common cancer in Scotland. Scotland has a higher incidence of colorectal cancer than most other Western European countries, together with lower survival rates.

**169.** Audit Scotland is currently reviewing the quality and performance of colorectal cancer services in Scotland. The review focuses on the patient's experience of these services, and explores key issues such as demand and capacity for diagnostic services which are a problem across NHSScotland. The review aims to help NHS boards develop strategies to meet the 2005 waiting time target set by the Scottish Executive. It will report in spring 2005.

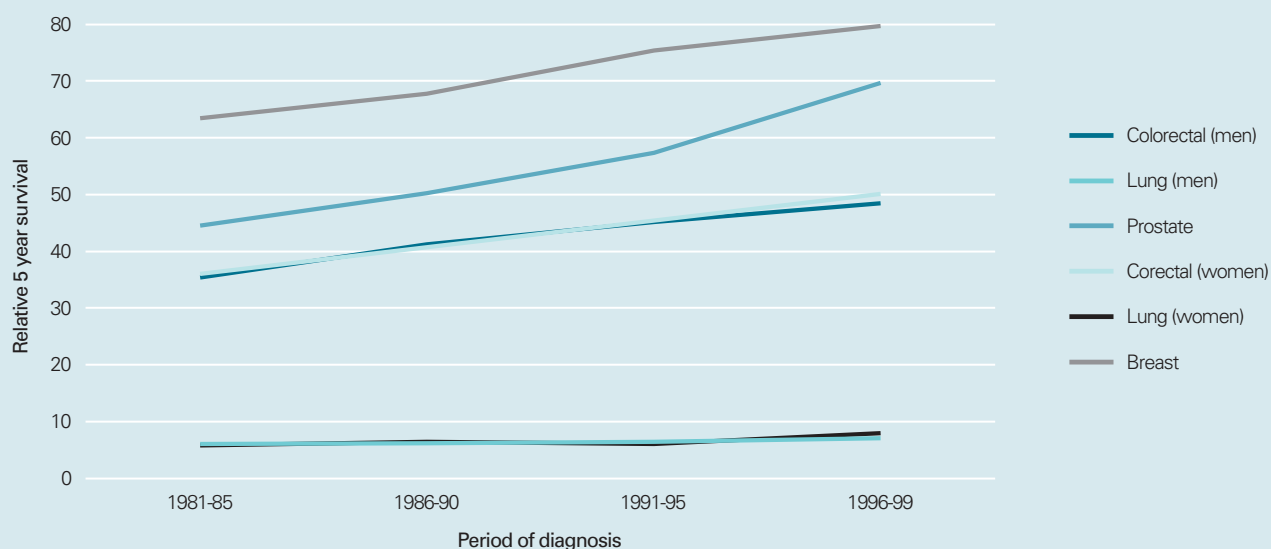
51 *Cancer in Scotland Action for Change Annual Report*, Scottish Executive, 2003.

52 *Cancer Scenarios: an aid to planning cancer services in Scotland in the next decade*, The Scottish Executive, 2001.

53 *OHE 15th Compendium of Health statistics*, OHE, 2003.

## Exhibit 22

Five-year relative survival trends by period of diagnosis for men and women, most common cancers, Scotland (1981 to 1999)



Source: Scottish Cancer Intelligence Unit, ISD Scotland

### Other cancers

**170.** Mortality rates for other cancers present a mixed picture. The mortality rate for oesophageal cancer has been steadily increasing in men since the 1970s. Mortality rates in women have also risen to a lesser extent, and now appear to be stable.<sup>54</sup> Between 1992 and 2002 mortality from prostate cancer rose by 12% and from ovarian cancer by 10%. There have been improvements in mortality rates for stomach cancer, which have fallen by 25%, and cancer of the pancreas, which have fallen by 7%.

### Children's cancers

**171.** The number of children in Scotland surviving cancer has increased dramatically over the last 25 years.<sup>55</sup> Childhood cancer cases increased by 22% between 1975/79 and 1995/99, but mortality fell by 47% and the percentage surviving for five years or more rose from 50% to 76%. Cancers of the blood and lymphatic system accounted for about 44% of all childhood cancers, with leukaemia and central nervous

system tumours being the most common. International comparisons show that Scotland has a lower incidence than Denmark and Finland and a higher survival rate than England, Wales, Netherlands, Hungary and Spain.<sup>56</sup>

### Surviving cancer

**172.** Although the number of people diagnosed with cancer is rising, survival is improving so that people can increasingly think of living with, not dying from, cancer. Five-year survival rates have increased overall and for the four most common cancers (Exhibit 22).

**173.** There has been consistent improvement in survival rates for all of the most common cancers, but some are improving more than others. There has been a significant improvement in relative survival for breast and prostate cancers, but survival for lung cancer remains relatively low.

**174.** Although survival rates are improving, Scotland still compares poorly with other European countries which are also improving over time. Five-year survival rates for breast, prostate and colorectal cancers are poorer in Scotland than England, France, Germany, Italy, Netherlands and Sweden.

### Screening for cancer

**175.** The new European Code Against Cancer calls for nationally organised programmes of screening for breast, cervical and colorectal cancer. In Scotland there are long established national programmes for breast and cervical screening, which are described below.

### Cervical cancer screening

**176.** The Scottish Cervical Screening programme was introduced across Scotland in 1987. Currently 350,000 women between the ages of 20 and 60 years are screened each year with recalls at least once every five years. A new national call-recall system for cervical cancer screening is being

54 *Understanding the health of Scotland's population in an international context*, Cannegieter S, Leon DA, Morton S, McKee M, 2003.

55 *Childhood Cancer in Scotland: incidence, mortality and survival, 1975-1999*, Information & Statistics Division, 2004.

56 News release: SEHD 617/2004.

phased in and should be fully implemented by 2006.

**177.** The Scottish Executive target is for 80% of eligible women to be regularly screened for cervical cancer. In the past five years, NHS boards have consistently achieved the target, and the national average has been around 87%. This is good news, but it raises the question of whether the target is challenging enough.

#### Breast cancer screening

**178.** The Scottish Breast Screening Programme was introduced across Scotland in 1988. Around 145,000 women between the ages of 50 and 64 years are invited for screening each year, with recalls every three years.

**179.** The Scottish Executive target is for 70% of eligible women accepting an invitation to attend a routine appointment to be screened for breast cancer. Data are reported in three-year cycles and since 1991 the NHS in Scotland has consistently achieved the 70% target overall. But the most recent data show that NHS Greater Glasgow and NHS Lanarkshire are not reaching this 70% target.

#### Colorectal cancer screening

**180.** The Scottish Executive is committed to introducing a national colorectal screening programme taking into account the recommendations of the UK National Screening Committee.

#### Coronary heart disease and stroke

**181.** Coronary heart disease (CHD) and stroke are major causes of death and ill-health in Scotland. The Scottish Executive published its Coronary Heart Disease and Stroke Strategy in

October 2002. The strategy carries with it an additional £40 million for the three years to 2005/06.

#### Coronary heart disease

**182.** CHD is second only to cancer as the leading form of death in Scotland. CHD accounted for 21% of deaths in 2001<sup>57</sup> and it is estimated that half a million people in Scotland have CHD, of whom 180,000 require treatment for symptomatic disease.<sup>58</sup> In general, men are more likely to suffer and eventually die from CHD than women.

**183.** Over the last ten years CHD mortality rates for both men and women have declined by around 38%. The reasons for this decline in mortality are not absolutely clear, but it has been suggested that around 40% of the reduction is due to improved treatment with up to 50% attributed to lifestyle changes such as smoking less, lowering cholesterol and controlling blood pressure.

**184.** The Scottish Executive has set a target of reducing the age standardised mortality rate from CHD for people aged under 75 by 50% between 1995 and 2010. Since 1995 deaths from CHD have reduced by around 35%. The target is likely to be achieved if present trends continue.

**185.** The most recent data show that deaths from CHD vary considerably across Scotland and there is also variation in reducing mortality rates. [Exhibit 23](#) shows the death rate for CHD per 100,000 population in each NHS board area in 2001. The average age standardised death rate from CHD for people aged under 75 years was 84 per 100,000 population in 2001.

**186.** Despite the reduction in death rates over the past decade Scotland still compares poorly against our UK counterparts and remains the second highest in Western Europe. This is because death rates from CHD are also declining in other countries, and in several of these countries the rate of decline has been faster than in Scotland. Unless the current rate of decline accelerates then Scotland will continue to be near the top of the mortality table for the foreseeable future.

#### Stroke

**187.** Scotland has seen a significant reduction in death rates from stroke in men and women over the last ten years. For example, death rates for men have fallen by 35%. This reduction is better than in England and Wales (30%), Germany (27%), France (21%) and Northern Ireland (15%). But Scotland still has the highest death rate in the UK, with 44 deaths per 100,000 population for men and 33 deaths per 100,000 population for women.

**188.** The Scottish Executive target is to reduce the age standardised mortality rate from stroke in people aged under 75 by 50% between 1995 and 2010. Since 1995 the death rate from stroke for both sexes, aged under 75, has reduced by 30% and the target is likely to be achieved if present trends continue.

**189.** The rate of reduction in deaths from stroke varies across the country ([Exhibit 24](#)).

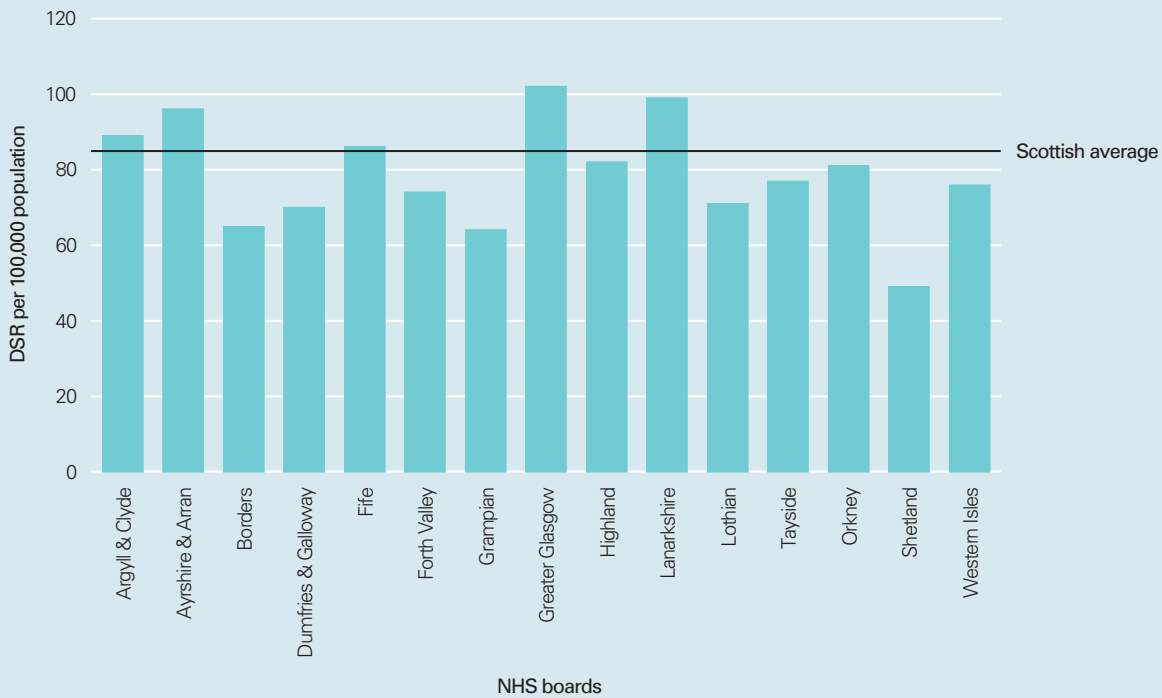
<sup>57</sup> General Register Office for Scotland.

<sup>58</sup> *CHD/Stroke Task Force Report*, Scottish Executive, 2000.



## Exhibit 23

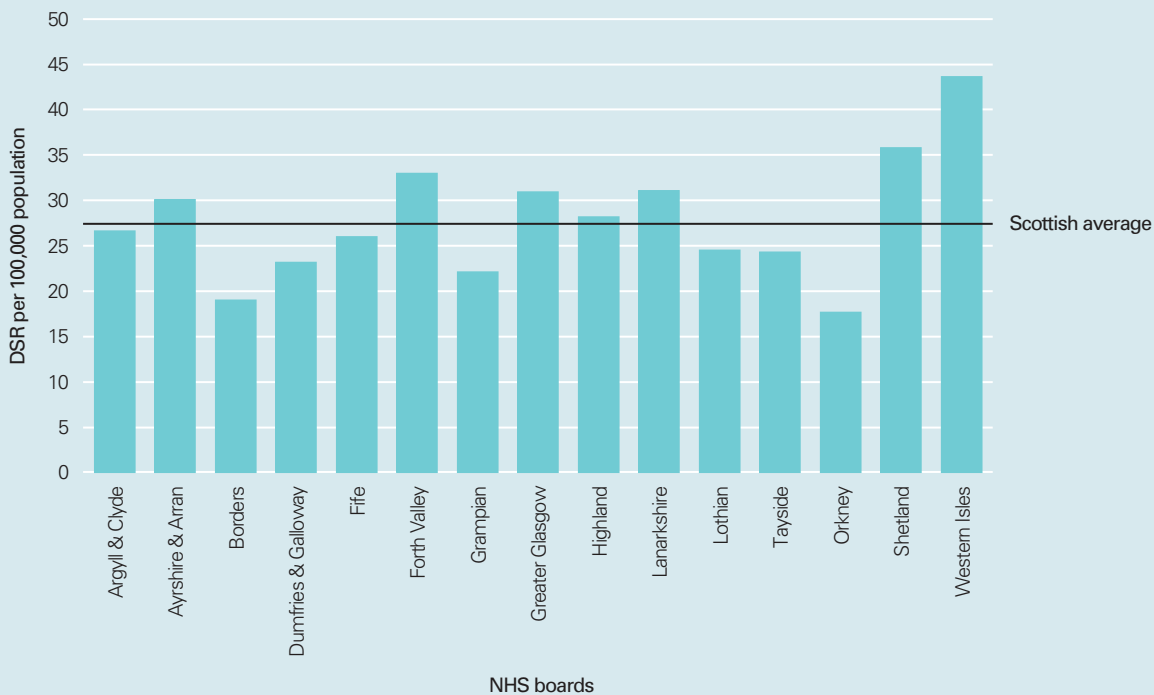
Age-standardised death rates for CHD per 100,000 population by NHS board area (2001)



Source: SKIPPER

## Exhibit 24

Age-standardised death rates from stroke per 100,000 population by NHS board area (2001)



Source: SKIPPER

## Mental health

**190.** Mental health problems are among the commonest causes of ill-health in Scotland. People with a mental health problem may have contact with the NHS through their GP, a specialist community mental health team, or as a hospital outpatient, day patient or inpatient.

**191.** NHS boards spent nearly £800 million on mental health services in 2002/03, an increase of 2% on the previous year. Councils planned to spend over £52 million on mental health services, significantly higher than in previous years. The SEHD has allocated a further £20 million through the Mental Illness Specific Grant to fund projects for people with mental health problems. The Executive is also making available an additional £17.1 million each year from April 2004 for the implementation of new mental health legislation.<sup>59</sup>

**192.** The National Programme for Improving Mental Health and Well-Being was introduced in October 2001. A three-year action plan to implement the programme was launched in September 2003, with Health Improvement Funding of £24 million for the three years to 2005/06. The action plan has four key aims: raising awareness and promoting mental health and well-being; eliminating the stigma and discrimination associated with mental health; preventing suicide; and promoting and supporting recovery.

**193.** Around 30% of GP consultations each year are for mental health problems, with depression the most common diagnosis. For both anxiety and depression, GP consultation, incidence and prevalence rates are

higher for women than for men. Scotland spends 40% more per head of population on antidepressant drugs than in England.

**194.** As well as the high level of GP consultations, about 30,000 people were admitted to mental health specialties in Scottish hospitals in 2000/01, around 10% were under 24 years old. The number of men admitted has been more or less constant over the last five years while the number of women admitted has fallen slowly.

**195.** Length of time in hospital varies greatly. Overall about 65% of those discharged from hospital stayed less than four weeks, while just over 4% stay for over a year. About 16% of current inpatients have been in hospital for less than four weeks while 60% have stays of over one year.

## Suicide

**196.** Around 600 people in Scotland commit suicide each year with a further 200 deaths from undetermined causes. Suicide is the leading cause of death in young men in Scotland. Scotland's suicide rate is much higher than the rate for the UK as a whole, and the rate of increase over recent decades is among the highest in Europe.

**197.** The Scottish Executive has set a target of reducing the suicide rate in Scotland by 20% by 2013. Initial funding of £12 million has been made available, as part of the £24 million for the national programme, to take forward national and local work in support of the first phase of the Choose Life Strategy for the three years to 2005/06.

# Part 7. Joint working

## Key messages

The predicted growth in the older population will put increasing pressure on health and community care services. In particular, the growth in emergency admissions is most marked for older people, and delayed discharges from hospital remain a problem despite new money and concerted efforts by local health and council partnerships.

## A growing older population

**198.** Over the next 23 years the number of people aged 65 and over in Scotland is predicted to rise from 812,000 to almost 1.2 million (an increase of 46%), and those aged 85 and over will almost double to 174,000. [Exhibit 25 \(overleaf\)](#) shows the projected trend for older people as a percentage of Scotland's total population. Older people are major users of health and social care services. Over the same period there is a predicted drop in the number of

people available to take on unpaid carer responsibilities.

## Joint working

**199.** Planning healthcare services for older people cannot be done by the NHS alone. NHS bodies, councils and the independent sector need to: work together to support people in their own homes; help prevent people being admitted to hospital in the first place; and provide support on discharge. The Joint Future Agenda promotes better joint working between health and local government. These bodies are now expected to jointly resource and manage community care services for older people. The aim is to ensure that service users receive a genuinely seamless service, which is not hampered by professional and service boundaries. Current monitoring of these arrangements shows that partnerships are developing processes and accountability arrangements. But further work is needed to evaluate whether these new arrangements

are making a real difference to the quality of older people's lives. Work will also be needed to ensure that the new Community Health Partnerships build on the existing work of local partnerships.

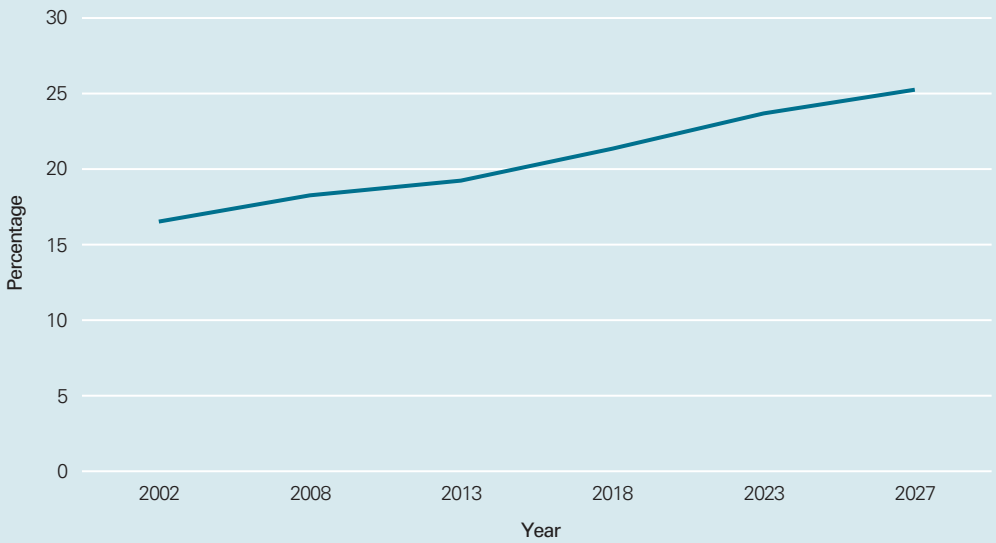
## Admitting and discharging older people from hospital

**200.** The increase in emergency admissions to hospital has been most marked for people in the oldest age groups ([Exhibit 26 overleaf](#)).<sup>60</sup> This trend is likely to increase as the number of older people in the population grows.

**201.** Emergency admissions have increased steadily over the years and are now one of the greatest sources of pressure on the NHS. Emergency admissions among the very old have generated particular pressures. Almost all of the increase in bed days occupied by emergency inpatients relates to patients aged 80 and over, and most of these bed days can be attributed to patients who were admitted as an emergency four or

### Exhibit 25

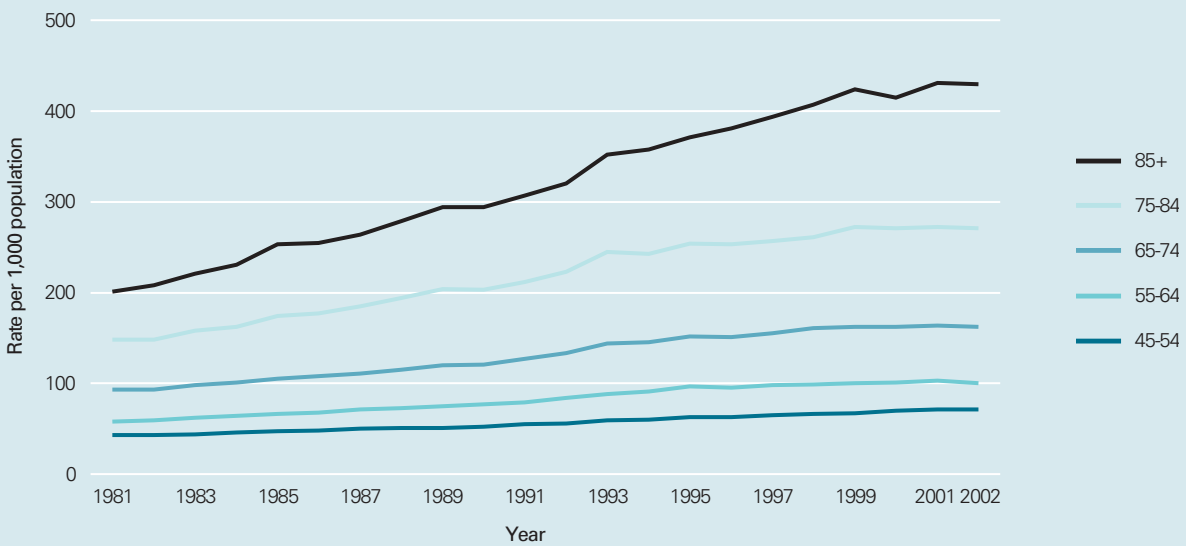
Projections for older people as a proportion of total population (2002 to 2027)



Source: General Register Office for Scotland

### Exhibit 26

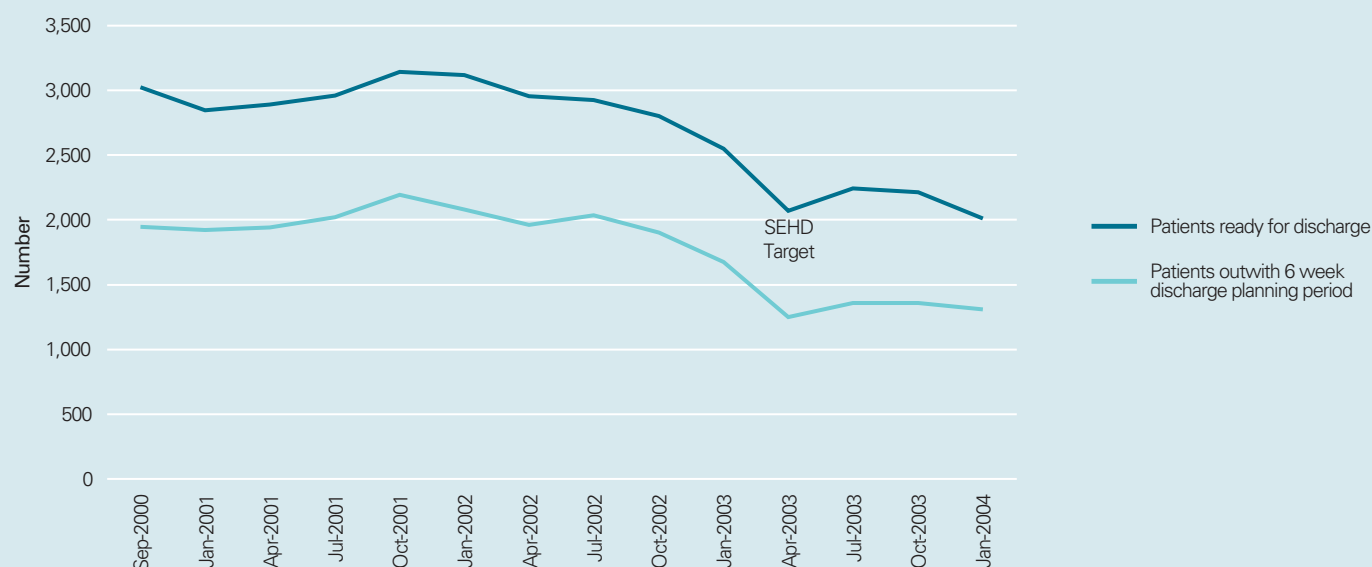
Trends in emergency admission rates by age group (1981 to 2002)



Source: ISD

## Exhibit 27

Patients ready for discharge and patients waiting six weeks or more for discharge (September 2000 to January 2004)



Source: ISD

more times in a five year period. As the population of Scotland gets older the burden on emergency care is likely to increase.

### Delayed discharges

**202.** Over 90% of all delayed discharges occur after emergency admissions. Data show that emergency admissions are increasing and that older people account for the greatest rise in emergency admissions.<sup>61</sup>

**203.** Delays in discharging people from hospital can be distressing for patients and can reduce hospitals' ability to manage their beds effectively. Delayed discharges most commonly affect older people and can occur when the care, support or accommodation they require in the community is not ready. Thirty million pounds of ring-fenced money has been made available for each of the next three years to tackle this problem. The new money will have most effect if it is used to develop sustainable services in the community.

**204.** A national quarterly census is carried out by ISD to measure the number of patients ready for discharge and the main causes for these delays. The number of patients who experienced a delayed discharge from Scottish hospitals reached a peak in January 2002 when 3,116 patients were identified as being ready for discharge. In March 2002, the Scottish Executive set a target for 1,000 extra patients to be transferred to more appropriate care by April 2003. The April 2003 census confirmed that this target had been met. The latest census<sup>62</sup> reports that 2,088 patients are ready to be discharged from Scottish hospitals. [Exhibit 27](#) shows the trend in delayed discharges and those patients whose discharge has been delayed for six weeks or more.

**205.** Audit Scotland is currently carrying out a joint project with ISD to model the whole system for delayed discharges in Tayside. The work involves NHS Tayside and its three council partners, Angus Council, Perth and Kinross Council

and Dundee City Council. We will report our findings early in 2005.

**206.** The Minister has recently announced an expert group to consider how performance can be further improved in this area. It will look at:

- the scope to eliminate delays over six weeks
- the cost and feasibility of introducing a management information system between councils.

### Developing a range of community care services

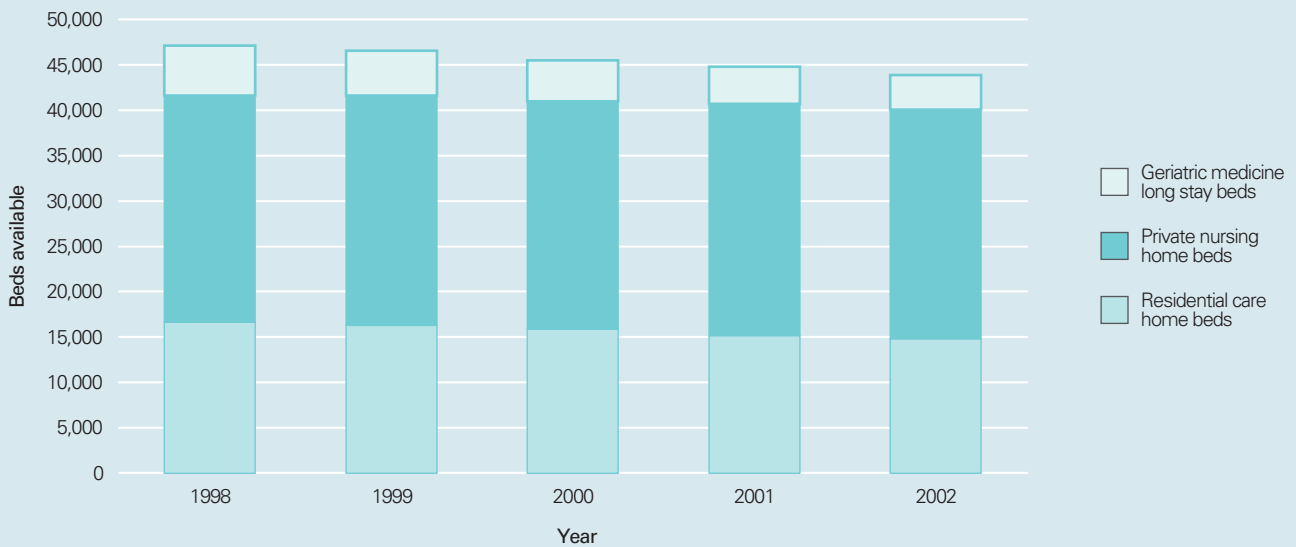
**207.** A range of services is needed in the community to meet older people's needs and to ensure that they are not kept in hospital unnecessarily. The Scottish Executive's policy is to enable more older people each year to live and be cared for in their own homes. Single shared assessment and joint management and resourcing for

61 *Increasing emergency admissions among older people in Scotland: a whole system account*, Steve Kendrick and Margaret Conway, ISD Scotland, November 2003.

62 *Patients ready for discharge in NHSScotland figures from January 2004 census*, ISD Scotland, April 2004.

## Exhibit 28

Total beds available in NHS hospitals and care homes (1998 to 2002)



Source: Scottish Community Care Statistics

older people's services are already in place, and have been extended to all community care client groups from April 2004.

**208.** Over the past ten years there have been some shifts in the type of provision available. NHS long stay beds have reduced significantly, and care home places (previously designated residential or nursing home places) have levelled off and are now starting to fall. Overall there are over 3,200 fewer long stay beds now than in 1998 (Exhibit 28). Average occupancy levels in care homes have increased over the same period and now stand at 90%.

**209.** Since 1995 the number of people receiving home care provided or purchased by councils has decreased by about a third.<sup>63</sup> The number of home care hours has increased by around 13% since 1998. This reflects a move to target home care on those who need most help. The number of clients receiving more than ten hours of home care per week has increased by 50%, and

two in five users now receive more than 19 hours of home care each week. Three quarters of people receiving home care services live alone and four in five are over 65.

**210.** In summary, long stay beds and care home places for older people have reduced over the past few years. The number of home care clients has also reduced although this reflects the focus on delivering intensive care packages in the community. But the predicted rise in the number of older people, combined with a reduction in family carers means that there may be a capacity issue in the future. In addition, there is likely to be more demand for lower level preventative services which can enhance older people's lives.

**211.** More work is needed to develop measures that provide information on the performance of community services and their outcomes.

# Appendix 1: Aims, objectives and targets of the NHS in Scotland

<b>Aim</b>	<b>To improve the health and the quality of life of the people of Scotland and deliver integrated health and community care services, making sure there is support and protection for those members of society who are in greatest need.</b>
<b>Objective 1:</b>	<b>Work towards a step change in the life expectancy for Scots, particularly disadvantaged members of the community, including children and older people.</b>
<b>Targets</b>	<ul style="list-style-type: none"> <li>• Achieve a 50% reduction in death from coronary heart disease in people under 75 between 1995 and 2010.</li> <li>• Achieve a 20% reduction in death from cancer in people under 75 between 1995 and 2010.</li> <li>• Achieve a 50% reduction in death from cerebrovascular disease (stroke) in people under 75 between 1995 and 2010.</li> <li>• Achieve a reduction in smoking from 35% to 33% between 1995 and 2005 and to 31% by 2010.</li> <li>• Achieve a reduction in the incidence of adults exceeding weekly drinking limits for men from 33% to 31% between 1995 and 2005 and to 29% by 2010 and for women from 13% to 12% between 1995 and 2005 and to 11% by 2010.</li> </ul>
<b>Objective 2:</b>	<b>Ensure that health care providers provide swift and appropriate access to integrated health care, covering primary, community and acute care.</b>
<b>Targets</b>	<ul style="list-style-type: none"> <li>• Guarantee access to a GP, nurse or other health care professional within 48 hours by April 2004.</li> <li>• No patient should wait longer than 26 weeks for a new outpatient appointment by the end of 2005.</li> <li>• No patient should wait longer than 2 months from urgent referral to treatment for all cancer cases by the end of 2005.</li> <li>• No patient should wait more than 6 months from diagnosis for inpatient treatment by the end of 2005.</li> </ul>
<b>Objective 3:</b>	<b>Improve the patient's experience of services provided by the NHS.</b>
<b>Targets</b>	<ul style="list-style-type: none"> <li>• Bring 12,000 nurses and midwives into the NHS by 2007.</li> <li>• Develop a national framework for improving the quality of clinical care by April 2004.</li> <li>• All hospitals to have made significant progress towards NHS Quality Improvement Scotland standards on infection control and clean hospitals by April 2003 and to make further progress each year thereafter.</li> </ul>
<b>Objective 4:</b>	<b>Improve services for older people, at home and in care settings.</b>
<b>Targets</b>	<ul style="list-style-type: none"> <li>• Progressively enable a greater number of older people to live and be cared for in their own homes in each year to March 2006.</li> <li>• Ensure by 2005 that all those with unmet need for free personal care are identified and receive the services they need.</li> </ul>

## Appendix 2: Allied Health Professionals

Profession	Main function
Art therapists	Help patients to understand their problems and come up with solutions through the use of arts such as painting, drawing and sculpture, drama and music.
Chiropodists/Podiatrists	Diagnose and treat foot problems, carry out nail surgery and give advice on proper care of the foot especially for those with conditions such as diabetes.
Dietitians	Work with people to promote wellbeing, prevent food-related problems and treat ill-health through diet.
Occupational therapists	Use a variety of activities, and/or equipment and adaptations, to enable recovery after illness or injury and to support independent living and health.
Orthoptists	Diagnose and treat a range of eye disorders and defects of vision.
Orthotists & Prosthetists	Design and fit pieces of equipment known as orthoses to patients who need support for a weak arm, leg or spine and provide care and advice for patients who have lost or were born without a limb, fitting the best possible artificial replacement.
Physiotherapists	Assess and treat people with physical problems caused by an accident, ageing, disease or disability promoting recovery and relief from pain.
Radiographers	Produce high quality images using all kinds of radiation, such as X-rays, and other tests to diagnose illness and treat patients using radiation therapy, and occasionally drugs, and support their care through all phases of the illness.
Speech and language therapists	Assess, diagnose and treat people who have communication and/or swallowing difficulties.

Source: ISD









# An overview of the performance of the NHS in Scotland



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